



vol. 6 No. 3 September 2022

#### **FOREWORD**

The first thematic block in this issue of the Journal of International Legal Communication is structured around security. Marija Tomljenović and Marina Srdoč refer to the Russian invasion of Ukraine and its impact on energy security around the world. Their intention is to contribute to a better understanding of what measures can be necessary to achieve energy security, including independence from Russian gas. Iryna M. Sopilko and V.B Cherevatiuk highlight the relationship between information protection in the cybersecurity system and freedom of expression, in the position of the UN and the case law of the European Court of Human Rights. They point out that legal regulations of cybersecurity in Ukraine strive to strikie a balance between those elements. Tomislav Bukša, Juraj Bukša, and Gordana Nikolić discuss the possiblieityto achieve complete decarbonization of the SSS fleet in accordance with the IMO Strategy and the Green Plan for Europe 2050. The results of their interdisciplinary research confirm the crucial importance of individual quality elements of propulsion systems. The question of security is also connected with corruption and financial matters. I Made Pria Dharsana, Indrasari Kresnadjaja, and I Gusti Agung Jordika Pramanditya discuss the problem of funding coming to the state from third parties, including debts from foreign institutions. They point out that this gives authority over the limits of state authority and may lead to conflicts of interest violating legal regulationss granting management rights.

The second section is devoted to issues connected with education. Linda Juraković, Tea Golja, and Matteo Legović prove in their paper that the management of educational institutions in Croatia has not reached the desired level of cognition. Altghough it is a necessary element in the field of correct management, Croatia is still in a state of high demand for quality and educated specialists. Thus, the authors propose a project for research of competences of



school principals managing educational institutions. Marian Byrka, Andrii Sushchenko, Oleksandra Chubrei, Nataliia Yakubovska, and Hanna Dudchak identify new challenges and opportunities for teacher professional development in the context of contemporary transformation of the Ukrainian education system.

On behalf of the JILC Editorial Board, I wish you a pleasant reading.

Joanna Osiejewicz Editor-in-Chief

## CONTENTS

The Impact of the Russian Aggression against Ukraine: Uncertainty, Insecurity and Fear of the Energy Policy in the Face of War and the Consequences of War Marija Tomljenović, Marina Srdoč	5
Cyber Security and Personal Rights under the Legislation of Ukraine  Iryna M. Sopilko, V. B. Cherevatiuk	18
Possibilities and Limitations in the Application of the Green Plan For SSS Ships from the Aspect of Improving the Quality of Propulsion Systems Tomislav Bukša, Juraj Bukša, Gordana Nikolić	26
The Legal Consequences of the Government's Policy of Attracting Foreign Investors Based on the Omnibus Law I Made Pria Dharsana, Indrasari Kresnadjaja, I Gusti Agung Jordika Pramanditya	42
Quality of Education in Croatia and Perspectives of Quality Management of Education— Applications of Research on Tourism Development Linda Juraković, Tea Golja, Matteo Legović	52
Teacher Professional Development in the Conditions of Education Transformation: New Regulatory Framework, Challenges and Opportunities Marian Byrka, Andrii Sushchenko, Oleksandra Chubrei, Nataliia Yakubovska, Hanna Dudca	60 hak
Judical Review: the Dispute Settlement by the Court Institution between the Foundation and its Management Ida Bagus Bayu Brahmantya, I Nyoman Suyatna, Dewa Gde Rudy	71
Academia	
International Legal Communication: a New Master Programme at the University of Wasaw  Joanna Osiejewicz	82

# THE IMPACT OF THE RUSSIAN AGGRESSION AGAINST UKRAINE: UNCERTAINTY, INSECURITY AND FEAR OF THE ENERGY POLICY IN THE FACE OF WAR AND THE CONSEQUENCES OF WAR

Marija Tomljenović

Phd Student of the Faculty of Law, University of Rijeka,
Associate at the PAR University College in Rijeka
7 Kastavska, Rijeka, Croatia, 51000
https://orcid.org/0000-0001-7369-7281
marija.tomljenovic@student.uniri.hr

#### Marina Srdoč

Professional Assistant,
PAR University College,
4 Rijeka resolution Square, Rijeka, Croatia, 51000
msrdoch@gmail.com

Abstract. On February 24, 2022, Russia, led by Putin, destroyed the European world peace by a military attack on Ukraine under the pretext that Ukraine poses a constant threat to Russia, hindering the development of Russia and its existence. The Russian invasion of Ukraine, which for Putin is a fiction "about a special military operation", has greatly affected energy security around the world and provoked uncertainty in the field of energy policy both in Europe and in the world. The authors of this paper do not intend to present their final judgment and outcome on this issue, especially for the reason that the situation in the field of energy policy changes from day to day. However, the authors want to contribute to better understanding of this problem in terms of what can be expected in the future. This involves the measures necessary to achieve energy security, including independence from Russian gas. In addition, it can be assumed that after the introduction of Western sanctions against Russia, Putin manipulates and uses energy policy as his political weapon.

**Keywords:** energy security, independence from Russian gas, alternative gas solutions, renewable energy sources, the principle of solidarity, the principle of efficiency.

#### INTRODUCTION

After the economic crisis caused by the coronavirus pandemic Covid 19, February 24, 2022, is a date that will be studied in creation of history, and especially a date that we will never forget. The Russian invasion of Ukraine, as well as Putin's strategy of warfare, have affected the world, both militarily and geopolitically, economically and financially. On this note, the consequences of the war in Ukraine have a significant impact on energy policy and

energy security. The consequences of the Russian aggression against Ukraine turned out to be unfavorable for the European industry, which is showing the first signs of its closure. We can say that the increase in gas prices and oil supplies in Europe is a huge shock to the commodity market. The energy costs of metallurgical plants are steadily increasing, and the costs of a fertilizer plant and a paper mill are also inevitable. The EU is heavily dependent on Russian energy carriers, whose dependence is related to crude oil, gas and coal, however, although dependence on oil and coal does not pose such a big problem, since there is a possibility of alternatives, it is gas that is difficult to replace.

The consumption of Russian gas in the EU is more than 40%, while the situation in Germany is approaching an alarming state. In this regard, we cannot ignore, in response to the sanctions imposed on Russia, the threats of Russian President Vladimir Putin to close the Nord Stream-1 gas pipeline, the threat of which is most feared by Germany. Nord Stream-1 is the longest offshore gas pipeline, through which 55 billion space meters of gas are transported annually under the Baltic Sea (Hina, 2022). Although the threats to close the gas pipeline did not come true, Gazprom, after imposing sanctions against Russia under the pretext of "force majeure", in order to "get closer" to non-fulfillment of its contractual obligations within the meaning of the law, began to reduce natural gas supplies, which led to an even greater increase in consumer prices. In the case of the worst-case scenario, Europe should be prepared not only to reduce natural gas supplies, in particular, threats to close the "pipe" indicate that Russian energy policy is a powerful tool that Russia, led by Putin, manipulates and uses as a political weapon, all in order to achieve its own goals.

#### IMPLICATIONS FOR THE ENERGY MARKETS

Russia, one of the largest energy suppliers in the world in the energy market, occupies a unique position, and consequently a great influence not only on Europe, but also on the United States. After Saudi Arabia, as the first largest producer and exporter of crude oil, according to the Central Intelligence Agency (CIA) World Factbook, Russia ranks second in this matter and first in natural gas exports. In 2021 Russia exported approximately 4.7 million barrels of crude oil per day to countries around the world, of which China alone imported 1.6 million barrels of oil per day, and Europe 2.4 million barrels of oil per day. A wide network of export gas pipelines, transit routes through Belarus and Ukraine, as well as pipelines included the EU, whose total consumption of Russian gas is more than 40% ( The International Energy Agency (IEA, 2022c). As for oil and coal, the EU imports 27% of oil from Russia and 46% of coal (European Commission and Secretariat -General, 2022).

Regardless of the outcome of the war, Russian aggression against Ukraine will leave behind inevitable consequences for energy markets and, in particular, for energy policy and energy security. Achieving the balance of the energy trilemma (sustainable development, security and accessibility) is necessary, the most important of which is energy security, to the maximum extent possible while reducing the dependence of imported fuel and the efficient functioning of the world market. Despite the fact that a longer period of time is required, achieving increased energy security is also possible with sustainable development by doubling the supply of low-carbon energy, as well as by successfully managing demand (Mackenzie, 2022).

High gas prices are projected until 2026 and, consequently, high electricity prices, but it is also important to note that by 2026 alternative gas supplies will not be enough, that is, until new LNG from America and Qatar. Such a scenario involves Russia manipulating the volume of gas supplies.

#### Current situation

We can all agree that during the quarantine throughout the pandemic, the instability of global energy markets was on the rise, while an additional unstable situation was disrupted by the Russian invasion of Ukraine due to the high demand for energy compared to its supply. The real consequences of the war in the energy markets will be visible only in a few years. The only accurate and reliable forecast that can be predicted in the near future is uncertainty and further price increases, which can greatly benefit both Russia and other oil and gas producers. Back in April of this year, Joseph Borrell² noted the dizzying figure of 1 billion euros of daily import costs from Russia. Thus, it can be concluded that the increase in prices in Europe by 60% for oil and 400% for natural gas is caused by an increase in demand after the weakening of the pandemic and the introduction of sanctions by the West against Russia (Butler, 2022).

In June, 2022, the current situation was such that Russia suspended the physical delivery of gas, regardless of Western sanctions, to countries such as Poland, Bulgaria and Finland. As a *ratio* for Poland and Bulgaria, Putin referred to the non-payment of gas supplies in rubles, and for Finland, *ratio* referred to its statement to NATO. Given one of these facts, Europe's goal is to create a situation in which Europe becomes independent of Russian gas (Krukowska and Nardelli, 2022). In this regard, the European Commission has concluded an agreement with the United States on the supply of 15 billion cubic meters of gas, while Germany and Italy also conclude their own agreements on gas supplies from Qatar and Algeria. Only an increase in efficiency can lead to the saving of a certain amount of gas, but also to the production of renewable energy sources.

However, nevertheless, this discrepancy between supply and demand and even the scenario of expanding renewable energy production, hence possible supply replacements, remains a current market problem. In addition, independence from Russian gas, that is, energy independence in general, may not happen overnight, so here we are not talking about a short-term, but a long-term problem. In particular, it takes two to three years to develop renewable energy sources in the most favorable conditions, about ten years for hydrogen, and fifteen or more years for new nuclear power plants. It can be concluded that price stability in the coming period cannot be predicted, as well as a decrease in energy prices, which leads to a high cost of living and, ultimately, to economic recession and inflation (Butler, 2022).

#### What can we expect in the future?

In the short term, during the year, we can expect that almost all European countries will refuse to supply Russian oil and find alternative options in sources provided by the Middle East and other countries. In this case, the price of oil will depend on the Organization of the Petroleum Exporting Countries (OPEC) (OPEC, 2022). Back in March of this year, OPEC agreed to a planned increase in production by 400 thousand barrels per day from the beginning of April, which indicates an expected increase in oil demand by 2.1 million barrels per day (IEA, 2022a). As for natural gas, the EU is determined to reduce dependence on Russian gas by even 80%, but one such step requires actions by all EU member states, which

Josep Borrell Fontelles is the EU High Representative for Foreign Affairs and the Security Policy and Vice President of the European Commission. From 2004-2007 he was President of the European Parliament.

include, among other things, the necessary investments to redirect energy, which in the end is not cheap at all. The European Commission estimated that in the event of a complete cessation of dependence on gas supplies to Russia, there are enough reserves to survive the upcoming winter (Krukowska and Nardelli, 2022).

Continuing in the same spirit, energy security, and with it the affordable price of energy resources are crucial for the security of the EU. Thus, the importing countries did not sit and wait for the situation to develop, but began to establish partnerships with manufacturers and suppliers from Qatar, as well as from Azerbaijan, which, in fact, can also be viewed through the prism of creating multilateral negotiations and agreements not only on supplies, but also in expanding long-term political, economic and security policy. Nick Butler, visiting professor, president and founder of the Institute of Politics at King's College London, expressed his point of view, with which the authors of this paper fully agree that one such scenario is not necessarily unfavorable, moreover, in the long term, a new NATO alliance may arise from one such network, that is, the "energy" alliance of NATO, which will unite exporting and importing countries aimed at maintaining energy security.

Consequently, Europe's insistence on reducing Russian gas imports to the European market, as well as in the context of the international level, is a plan that should be implemented by 2024, and in this regard, the conclusion of long-term contracts in order to achieve energy balance and security in ensuring gas supplies, in which agreements with the already mentioned Qatar as the main gas exporter will play a major role. In addition, it is also necessary to build new gas fields and even in politically sensitive areas, such as the waters off the coasts of Israel and Lebanon. Until such major projects are completed, however, there will be no expected reduction in gas prices, and it is assumed that prices will remain relatively high, as noted in the previous part of this paper. The authors believe that in the foreseeable near or distant future, due to the population growth trend, it will not be possible to avoid the growing demand for energy. It is assumed that solar and wind energy will become necessary means of generating electricity within a certain period of time, however, the authors believe that oil, gas and coal will not stop being produced and consumed as the main necessary energy sources, which will disappear and decrease to zero during the future period, narrower or wider points of use.

#### Alternative gas solutions

Alternative gas solutions are not the same for every manufacturing sector. In any case, the use of an alternative solution will depend on operating costs, of which renewable energy sources and nuclear energy occupy leading positions in terms of low costs. However, in the end, their quantity in a shorter period of time is not a sufficient replacement for gas. In this case, the alternative solution is the use of coal, which, in turn, due to Russia's invasion of Ukraine leads to higher costs and, therefore, can be considered as an exclusively temporary alternative solution, which will be by 2024 reduce gas consumption by only 6%. By the same year, bioenergy, the cost of which has not increased due to the consequences of the war, should reduce the consumption of Russian gas by 20%. Now, going back to the beginning and to renewable energy sources, we can say that their, although very slow efficiency, can still get closer to the desired goals. For example, within five years, renewable energy sources will become a sufficient replacement for Russian gas by only 20%, and by 2030 thanks to

renewable energy sources, Russian gas supplies will even decreased by more than 50% (World Economic Forum, 2022).

Nevertheless, alternative solutions for gas as a means by which Europe wants to achieve independence from Russian energy carriers, especially gas, are not a benchmark for energy security (Clifford, 2022). The main goal of independence from Russian energy resources is to achieve energy security as the main goal. Ultimately, this means an excellent functioning of the market on a global scale, which should provide a variety of effective solutions. Energy independence from Russia, to which the EU fully aspires, means dependence solely on its natural sources, local, national or regional sources, and achieving energy security from various sources means that each of them must be flexible and applicable regardless of existing opportunities or difficulties that may be affected or conditioned. The authors believe that energy independence from Russia, which the EU wants to achieve, in accordance with the percentages and a long period of time indicated at the beginning of this subsection, is nevertheless not entirely possible. Full flexibility of sources, and precisely because of various unpredictable situations that must be taken into account, for example, climate change, force majeure, etc., is not fully achievable. On the other hand, in addition to a well-developed plan, short-term and long-term, which is the topic of the next chapter and includes multilateral agreements with other countries of the world and the maximum use of alternative energy sources and their adequate storage, in particular renewable energy sources, can lead to a reduction in dependence on Russian gas, as well as to a long-term stable energy security.

#### THE EUROPEAN UNION: GAS SUPPLY

The European Union plans to reduce the import of Russian gas by a third. Recall that before the Russian aggression, the EU imported to Ukraine about 380 million cubic meters of Russian gas per day, which is about 140 billion cubic meters annually, of which about 15 billion cubic meters were supplied in the form of liquefied natural gas (LNG). In percentage terms, this is about 45% of the total volume of Russian gas imports and 40% of total gas consumption. Reducing dependence on Russian gas by more than a third in one year includes gas storage this year. The EU plan is in line with the European Green Deal and the results achieved in the IEA Net Zero Emissions by 2050 Roadmap, which the EU wants to implement by the end of 2030. It is important to note that the plan includes investments in new efficient technologies, the conditions of which should correspond to environmentally friendly results, which, however, are not identical in terms of geographical differences and supply conditions in all EU member States, besides they are very diverse. In order for one such plan to be successfully implemented, consistency in international cooperation and policy choice is absolutely necessary to ensure the balance of global markets.

#### EU Plan

In this part of the paper, the authors will present an EU plan aimed at reducing the EU's dependence on Russian natural gas. On March 3, 2022, the IEA issued a ten-point plan to reduce the EU's dependence on Russian natural gas. We are transmitting the plan of measures in full (see Table 1.).

Table 1. A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas (IEA, 2022b)

(1111, 2022)					
Measure 1.	Measure 6.				
No new gas supply contracts with Russia	Enact short-term measures to shelter vulnerable				
	electricity consumers from high prices				
Measure 2.	Measure 7.				
Replace Russian supplies with gas from alternative	Speed up the replacement of gas boilers with heat				
sources	pumps				
Measure 3.	Measure 8.				
Introduce minimum gas storage obligations to	Accelerate energy efficiency improvements in				
enhance market resilience	buildings and industry				
Measure 4.	Measure 9.				
Accelerate the deployment of new wind and solar	Encourage a temporary thermostat adjustment by				
projects	consumers				
Measure 5.	Measure 10.				
Maximise generation from existing dispatchable	Step up efforts to diversify and decarbonise sources				
low-emissions sources: bioenergy and nuclear	of power system flexibility				

Considering that the agreements concluded between the EU and Gazprom on gas imports in the amount of more than 15 billion cubic meters per year expire at the end of this 2022, while contracts for the import of gas in the volume of 40 billion cubic meters expire by the end of 2030, this gives the EU the opportunity to prepare in time for the conclusion of contracts with other exporting countries for the supply of gas and its consumption and, thus, for the implementation of measure number 1 (IEA, 2022c). The share of natural gas imports from Norway in 2021 amounted to 23.6%, which share including imports of gas from Azerbaijan, could increase by as high as 10 billion cubic meters per year.

All this, and the corresponding measure number 2 indicates the balance of supply and demand for LNG, which means their timely acquisition and, consequently, the already mentioned conclusion of multilateral agreements with various producers and suppliers of natural gas, as well as the efficient use of LNG capacities. In addition, one of the important goals is the extraction of low-carbon gas to reduce emissions by 2030 and 2050. For this purpose, we should not lose sight of the increase in the supply of biogas and biomethane, which will increase domestic gas production in the EU, as well as the production of low-carbon hydrogen by electrolysis, depending on new projects of electrolyzers. In accordance with the second measure, the EU will additionally supply gas with 30 billion cubic meters, the sources of which will not depend on Russia (IEA, 2022b). In accordance with the third measure, and in order to achieve a stable and balanced market, it is necessary, especially during the growth of geopolitical tensions, to ensure gas storage.

In particular, such a measure will allow to satisfy seasonal fluctuations, but it will also be able to ensure the *ratio* of supply and demand and, thus, prevent price increases. Of course, it is important to note that there must be an element of solidarity between the EU member states, both in terms of regional gas storage and access (IEA, 2022c). On renewable energy sources (measure no. 4.), an increase in the production of photovoltaic and wind power

plants will also greatly affect the reduction of consumer spending and, in addition, will lead to a reduction in gas consumption by 6 billion cubic meters (IEA, 2022a). If we look at the measure no. 5. we may conclude that the increase in bioenergy and nuclear energy is very important, given that the main source of low-emission electricity in the EU is nuclear energy. The current problem is the closure of four nuclear reactors by the end of 2022 and another one in 2023. Maintenance of existing nuclear reactors and construction of new ones will reduce the consumption of gas intended for electricity generation by 13 billion cubic meters (IEA, 2022a).

The EU will implement a measure (measure no. 6.) to protect vulnerable consumer groups from high electricity prices. It is already known that the high price of gas is the reason for the not so low wholesale price of electricity, which allows electricity producers to make a profit. "Current market conditions could lead to excess profits of up to EUR 200 billion in the EU for gas, coal, nuclear, hydropower and other renewables in 2022. Temporary tax measures to raise rates on electricity companies' windfall profits could be considered. These tax receipts should then be redistributed to electricity consumers to partially offset higher energy bills. Measures to tax windfall profits have already been adopted in Italy and Romania in 2022. (IEA, 2022b) Thus, the effect of such a measure would allow the inflow of additional funds, which would be evenly distributed among vulnerable groups of consumers. Installing heat pumps instead of existing gas boilers in accordance with the seventh measure, although one such project will require an additional investment of 15 billion euros, the EU will still be able to save 2 billion cubic meters of gas in the first year and in the coming years. Ultimately, the installation of heat pumps will increase energy efficiency in consumers' homes and reduce overall energy costs (IEA, 2022a).

In addition, analyzing the eighth measure, energy efficiency through the modernization of improved insulation in existing homes and non-residential buildings will save 1 billion cubic meters of gas per year, but will also lead to an increase in employment. Tripling the installation of intelligent systems in homes would mean a reduction in gas demand in the amount of 200 million cubic meters per year at a total cost of 1 billion euros. The EU has not spared small and medium-sized businesses. Helping small and medium-sized businesses install intelligent systems will provide 250 million cubic feet of annual energy savings. Thus, energy efficiency will affect increased competition in the industry, but, most importantly, it will reduce gas consumption for heating by about 2 billion cubic meters per year (IEA, 2022c).

A ninth measure is also added to this measure, concerning the correct regulation of the thermostat in households. Installing a heating thermostat at 22 °C will greatly affect the reduction of energy bills, as well as annual savings of 10 billion cubic meters for each degree of reduction (IEA, 2022a). Diversification and decarbonization of energy system flexibility sources as a last resort refers to sustainable and cost-effective ways to manage energy systems. Among other things, such management methods are associated with controlled production with low emissions, the development of long-term and efficient energy storage technology. "Domestically sourced low-carbon gases – including biomethane, low-carbon hydrogen and synthetic methane – could be an important part of the solution, but a much greater demonstration and deployment effort will be required." (IEA, 2022b)

Based on the above, it is clear that the EU's independence from Russian gas mainly depends on renewable energy sources, therefore solar energy, wind on land and wind at sea, ocean energy and hydropower, biomass and biofuels. The second key decision on independence concerns both consumers themselves and their personal control over electricity management, as well as high-quality communication between EU member States and their mutual solidarity, storage of new energy sources and assistance, as well as the establishment and maintenance of strong political, economic and protective ties with third countries states. The proposed measures aimed at achieving EU independence from Russian gas by 2030 represent great ambitions in which significant efforts must be made, since the current situation in the energy markets is such that they cannot reach the desired level of renewable energy of the EU.

If we take into account the closure of nuclear reactors without simultaneous investment in the construction of new ones, the diversity of geographical regions, climate change, the consequences of increasingly frequent earthquakes and, in particular, the negligence of consumers, the above plan can be viewed with some degree of distrust. Thus, the above-mentioned plan of 10 measures represents a long-term process, and given the state of war in Ukraine and the numerous refugees from Ukraine who are in dire need of assistance requiring funds, the pandemic, which is currently in a weaker flow of fluctuations, but do not lose sight of the fact that this will not lead to its stronger intensity again, the authors of this paper believe that this process of EU independence from Russian gas in the sense of full independence is not unattainable, but, nevertheless, it will take a much longer period of time, because by the end of 2030 there are only 8 years left, and that's not much time.. In any case, it cannot be denied that the EU's energy security will depend on the EU's energy independence from Russian gas. We are not sure that the EU will become completely energy independent from other countries and should not strive for this, but we believe that the EU can achieve energy security and price stability in cooperation with other countries if all EU members cooperate with each other, as well as to create an integrated energy market and sustainable energy development sector and energy security.

#### **LEGAL BASIS**

In accordance with the above and, in particular, in order to achieve the energy policy goals that the EU is striving for, in the light of the solidarity of all EU member States, the Treaty on the Functioning of the European Union (TFEU) in its article 194 provides for ensuring the functioning of the energy market and, accordingly, ensuring the EU's energy supply, promoting energy efficiency and energy conservation, as well as the development of new and renewable energy sources, as well as the promotion of interconnectedness of energy networks, noting that each of the EU member States has the right to use and choose its own energy resources (TFEU, 2016).

Thus, taking into account everything that has been written so far, we can clearly identify the goals in the field of EU energy policy related to the diversification of European energy sources and ensuring energy security in accordance with the principle of solidarity as one of the important principles of the Energy union. In addition, the full functioning of the integrated energy market is an important goal of the EU energy policy, which will ensure the free flow of energy to EU member States through the appropriate infrastructure. The principle of efficiency, which we dare to call the key principle of the Energy union, which

will reduce dependence on energy imports, especially Russian gas, and, in addition, will ensure a sustainable, competitive and affordable energy supply to the EU member States. Decarbonizing the economy and promoting research in the field of clean energy, as well as providing advantages to innovations that should be of common interest to all EU member States, in particular, to increase competitiveness in the global energy market.

### THE IMPACT OF RUSSIAN AGGRESSION ON UKRAINE REGARDING ENERGY SECURITY FOR THE REPUBLIC OF CROATIA

The President of the European Commission, Ursula von der Leyen, after the Russian invasion of Ukraine on the issue of the energy security crisis, the consequences of which were largely felt by the Republic of Croatia, said that it was necessary for the Republic of Croatia to increase its energy efficiency through the modernization of the gas pipeline (Hina, 2022). However, not everything is as black as it seems at first glance. Ivan Brodić, editor of the Energy Press portal, explained that the Republic of Croatia is not in such an unfavorable situation, moreover, in the past 2021 Croatia was referring to the excess gas through the node in Hungary, through which Croatia imports ground gas, and through the terminal in KRK, the Republic of Croatia imported almost all the necessary amount. With one of these established facts, in the foreseeable future we can assume an increase in terminals, as well as gas production in Croatia, which will be sufficient not only for export, but also for compliance with the principles of energy solidarity in accordance with the EU goals. The only question we can ask in this context is the question of price, because gas as an exchange commodity can only be sold at the exchange price (Brodić for Direktno.hr, 2022). Thus, it can be concluded that the LNG terminal in Krk in this uncertainty caused by the Russian aggression against Ukraine, but also in the future, is crucial for the energy efficiency of the Republic of Croatia. Recall that the KRK LNG for liquefied natural gas, the project of which was co-financed by the European Commission, began with its work in 2021. It should be noted that the terminal has met all expectations for a short period of operation to this day and in this energy crisis situation in Europe occupies a very important position from the point of view of energy policy as an energy facility that can further increase its capacity within two years, including through the construction of a ground terminal. Therefore, despite the fact that the warning of the President of the European Commission sounded like a "boomerang" with the best intentions, the Republic of Croatia, nevertheless, is in a good situation in this energy crisis, and it has decided to resolve the issue of energy security in accordance with the principle of energy solidarity, which is inwrought into the treaties of the European Union.

#### National goals of the Republic of Croatia

Increasing the consumption of renewable energy sources (RES) is one of the main goals for the Republic of Croatia. In this sense, Croatia aims to achieve by 2030 a share of 36.6% in gross direct energy consumption, 63.8% in gross direct electricity consumption, 36.6% in gross direct energy consumption for heating and cooling and 14% in direct energy consumption for transport. As for 2020 production, we can conclude that Croatia's goals in the use and consumption of renewable energy sources are not insignificant. (See Table 2.).

Table 2. Indicative goals of the Republic of Croatia on renewable energy shares until 2030 (Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja, 2020)

Share of renewable energy sources in %	Forecasts for 2020	Goals for 2030
Gross immediate energy consumption	29,6	36,6
Gross immediate electricity consumption	47,0	63,8
Gross immediate energy consumption for heating and cooling	33,3	36,6
Immediate energy consumption in transport	10,0	14,0

The achievement of the above goals and for gross immediate energy consumption will strive to be achieved with the help of technologies for obtaining energy from renewable energy sources, as well as with the help of solar energy, solid biomass, gaseous and liquid biofuels, geothermal energy, RES heat and electric RES. The contribution of renewable energy technologies to the electric power industry is associated with the investment and construction of new hydroelectric power plants, wind farms, solar photovoltaic power plants, geothermal power plants and thermal installations for solid and gaseous biomass. Solar energy, solid biomass, geothermal energy and RES heat will be used for immediate energy consumption for heating and cooling, while advanced biofuels and electricity from RES are a technology that will be gradually introduced for energy consumption in transport.

Croatia's goals predict that by 2030 at least 50% of the installed capacity for electricity generation should be at cogeneration power plants. Currently, the total capacity of hydroelectric power plants in Croatia is 2,200 MW, and by the end of 2030 it is expected to build two or three large hydroelectric power plants and several smaller hydroelectric power plants on watercourses and water supply systems, as well as the construction of one pumped storage power plant (Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja, 2020). If we compare the 10-point plan for the independence of the EU from Russian gas, although adopted in December 2020, the set goals of the Republic of Croatia correspond to the same; the energy transition of the Republic of Croatia and its transition to clean energy indicate that the Republic of Croatia as an EU member state is ready for new challenges, ambitions and investments aimed at using renewable energy sources and reducing the need for gas consumption, in particular, dependence on Russian gas.

#### Energy security

Ensuring energy security for the Republic of Croatia refers to the constant, safe and high-quality supply of all energy carriers, as well as to the launch of the planned supply of all energy resources and forms of energy. From the point of view of gas supply safety, the operational safety of gas supply is inevitable. Croatia currently supplies gas via routes from neighboring Slovenia and Hungary (Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja, 2020). However, taking into account the Russian aggression against Ukraine, a very important point for the Republic

of Croatia is to increase the gas storage capacity and precisely by ensuring the volume of gas for the upcoming winter. As for ensuring energy storage in the energy system (EES), the construction of pumping power plants will provide greater flexibility of the system and greater integration of variable renewable energy sources, primarily solar and wind. In addition, an increase in the share of renewable energy leads to a decrease in dependence on energy imports from third countries (Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja, 2020).

According to the above, the main framework for regulating the security of natural gas supplies in the Republic of Croatia is provided for by Regulation (EU) No. 2017/1938 of the European Parliament and of the European Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 (Text with EEA relevance) (Official Journal of the European Union, 2017). This regulation is aimed at ensuring that all necessary measures are taken to protect uninterrupted gas supply and, in particular, supplies to protected consumers in the event of severe climatic conditions or interruptions in gas supply. Regulation 2017/1938 entered into force on November 1, 2017, and the purpose of the regulation is to increase solidarity and trust between member States and to establish the measures necessary to achieve these goals through the most cost-effective measures and in such a way as not to disrupt gas markets.

The main improvements compared to the previous Regulation 994/2010 are: the introduction of a solidarity mechanism, according to which, in the event of a serious crisis, neighboring member States will provide assistance in ensuring the supply of households and basic public services; strengthening regional cooperation through regional risk groups, as well as a joint assessment of security risks and coordinated joint preventive and crisis measures and increasing transparency by introducing an obligation to inform the competent authority of contracts between the supplier and the buyer, which account for 28% or more of annual gas consumption on the national market (Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja, 2020).

Summa summarum, if we consider the energy transition, the total energy consumption in the period up to 2050 will decrease by about 16% compared to previous years, while the own supply in the period up to 2030 will increase to 55.2% with a decrease to 51.7% in 2050. Thus, this increase that its own supply for the Republic of Croatia comes from the sources already mentioned above,<sup>3</sup> that is from renewable energy sources, their systems flexibility, as well as the development and management of transmission networks and systems (Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja, 2020).

#### **CONCLUSIONS**

Energy is the most important branch of the economy that determines the development of the socio-economic policy of each country. Investment projects in power plants, oil and gas terminals, renewable energy sources and their storage, as well as their profitability cannot be fully guaranteed. The reason for this is numerous factors, such as population growth, climatic conditions, the development of science and new technologies, as well as geographical location and population level. Regardless of the outcome of the war in Ukraine, it can be concluded that Russia's invasion of Ukraine dealt a serious crisis blow to the global

The increase in own supply concerns already existing pumped storage power plants, existing and planned reversible hydroelectric power plants, battery systems of consumption level, gas power plants, balanced market organizations.

energy market, which ultimately led to an increase in energy prices and the urgent need to harmonize the *ratio* of demand and consumption.

It is clear that the establishment of energy security is the goal that Europe is striving for, and in this regard, reducing dependence on Russian gas, which was demonstrated in the EU plan and its ten measures, the first, most important of which concerns "no new gas supply contracts with Russia." (See Table 1, p. 8). If we consider the Republic of Croatia in this context, the whole complexity of creating energy security and independence from Russian gas will depend precisely on the principle of solidarity and efficiency between the EU member states. Of course, it is necessary to insist on ambitions for renewable energy sources. Although their profitability requires a longer period of time, they, nevertheless, with interstate cooperation, can eventually lead to independence from Russian gas and, consequently, to stable energy security which will also affect more favorable energy prices.

#### **REFERENCES**

Centre for European Reform. (2022). The impact of the Ukraine war on global energy markets. London, Brussels, Berlin: Butler, N. Retrieved from: https://www.cer.eu/insights/impact-ukraine-war-global-energy-markets

IEA. (2022a). Why does Russian oil and gas matter? Retrieved from: https://www.iea.org/countries/Russia#data-browser

IEA. (2022b). Oil Market Report. Retrieved from: https://www.iea.org/reports/oil-market-report-march-2022

IEA. (2022c). A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas. Retrieved from: https://iea.blob.core.windows.net/assets/1af70a5f-9059-47b4-a2dd-1b479918f3cb/A10-PointPlantoReducetheEuropeanUnionsRelianceonRussianNaturalGas.pdf

Organization of the Petroleum Exporting Countries (OPEC) (2022). General information. Retrieved from: https://www.opec.org/opec\_web/en/publications/344.htm

Clifford, C. (2022). Russia's war with Ukraine offers critical lessons for global energy markets. CNBC. Retrieved from: https://www.cnbc.com/2022/03/02/russia-ukraine-war-lessons-for-global-energy-markets. html

Krukowska, E., & Nardelli, A. (2022). EU Aims to Cut Russia Gas Dependence by Almost 80% This Year. Bloomberg. Retrieved from: https://www.bloomberg.com/news/articles/2022-03-07/eu-aims-to-cut-dependence-on-russian-gas-by-almost-80-this-year

Mackenzie, W. (2022). The Russia/Ukraine War And Its Implications For The Energy Markets. Forbes. Retrieved from: https://www.forbes.com/sites/woodmackenzie/2022/04/28/the-russiaukraine-war-and-its-implications-for-the-energy-markets/?sh=bb86ec519be8

World Economic Forum. (2022). This is how the war in Ukraine could affect Europe's clean energy transition. Retrieved from: https://www.weforum.org/agenda/2022/04/ukraine-war-europe-renewable-energy-transition/

Brodić for Direktno: Gas delivery will be restored through the first profile of the North Stream already this weekend. Croatia? We are in a good situation... (2022.). Retrieved from: https://direktno.hr/direkt/brodic-za-direktno-isporuka-plina-ce-se-obnoviti-kroz-prvi-profil-sjevernog-toka-vec-za-vikend-hrvatska-u-do-broj-smo-situaciji-285848/

European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions REPowerEU: Joint European Action for more affordable, secure and sustainable energy.

Strasbourg, 8.3.2022, COM(2022) 108 final. Retrieved from: https://op.europa.eu/en/search-results?p\_p\_id=eu\_europa\_publications\_portlet\_search\_executor\_SearchExecutorPortlet\_INSTANCE\_q8EzsBteHybf&p\_p\_lifecycle=1&p\_p\_state=normal&queryText=European+Commission%2C+Commission+Communication+to+the+European+Parliament%2C+the+European+Council%2C+the+Council%2C+the+European+Economic+and+Social+Committee+and+the+Committee+of+the+Regions%2C+RE-PowerEU%3A+joint+European+action+for+more+affordable%2C+secure+and+sust&facet. collection=EULex%2CEUPub%2CEUDir%2CEUWebPage%2CEUSummariesOfLegislation&startRow=1&resultsPerPage=10&SEARCH\_TYPE=SIMPLE

Official Journal of the European Union. (2016). Consolidated version of the Treaty on the Functioning of the European Union (TFEU). Title XXI, Energy, Article 194. Retrieved from:

Official Journal of the European Union. (2017). REGULATION (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010. Retrieved from: https://op.europa.eu/hr/publication-detail/-/publication/ec774a2b-bba8-11e7-a7f8-01aa75ed71a

Republika Hrvatska, Ministarstvo gospodarstva i održivog razvoja. (2020). Integrated national energy and climate plan for the Republic of Croatia, for the period from 2021 to 2030., p.2-246

https://eur-lex.europa.eu/resource.html?uri=cellar:9e8d52e1-2c70-11e6-b497-01aa75ed71a1.0006.01/D0C\_3&format=PDF

Hina. (2022, July 21). Russia still did not close the "tap". The Nord Stream 1 pipeline continued to operate, reducing European supply concerns. Glas Istre. Retrieved from: https://www.glasistre.hr/svijet/plinovod-sjeverni-tok-1-nastavio-s-radom-smanjujuci-europsku-zabrinutost-za-opskrbu-808734

Hina. (2022, August 4). How to mitigate the impact of the crisis? Ursula von der Leyen sent a serious warning to Croatia: 'You must strengthen energy security'. Retrieved from: https://net.hr/danas/hrvatska/ursula-von-der-leyen-poslala-ozbiljno-upozorenje-hrvatskoj-morate-ojacati-energetsku-sigurnost-b7a8fc98-13cb-11ed-9151-6a9f76043abf

## CYBER SECURITY AND PERSONAL RIGHTS UNDER THE LEGISLATION OF UKRAINE

Iryna M. Sopilko
Doctor of Law, Professor, National Aviation University,
1 Lubomyr Husar Avenue, Kyiv, Ukraine, 03680
https://orcid.org/0000-0002-9594-9280

sopilko\_i@ukr.net

Viktoriya B. Cherevatiuk

Candidate of Historical Sciences, Associate Professor,
National Aviation University
1 Lubomyr Husar Avenue, 1, Kyiv, Ukraine, 03680
https://orcid.org/0000-0002-4077-206X

vitacherev@ukr.net

**Abstract.** The aim of the article is to study the issue of achieving a balance between information protection in the cybersecurity system and freedom of expression in accordance with the position of the UN and the case law of the European Court of Human Rights. Research methods include the analysis of legislation on cybersecurity, generalization of legal information and cybersecurity practices. As a result, it was found out that in Ukraine the basic legal act on cyber security is the Law "On the basic principles of cyber security of Ukraine". The preamble of this Law defines the legal and organizational basis for protection of vital interests of citizens, society and state, national interests of Ukraine in cyberspace, main goals, directions and principles of state policy in cybersecurity, authorities of state bodies, enterprises, institutions, organizations, individuals and citizens in this field, the basic principles of coordination of their activities to ensure cybersecurity. Ukraine has ratified the Council of Europe Convention on Cybercrime of 23 November 2001. The Convention states that the fight against cybercrime is dictated, in particular, by the need to protect legitimate interests in the use and development of information technology. In particular, the Convention identifies the following types of cybercrime: offenses against the confidentiality, integrity and availability of computer data and systems; computer-related offenses; offenses related to child pornography; offenses related to copyright and related rights infringement. Finally, legal regulation of cybersecurity in Ukraine is based on the requirements of striking a balance between information protection and freedom of expression, the position of the UN and the case law of the European Court of Human Rights.

**Key words:** cybersecurity, cyberthreat, cybersecurity, cybercrime, cyberspace, personal data, public morality, intellectual property.

#### INTRODUCTION

The great strategist Winston Churchill said, "You have to pay for security, and in its absence, you have to pay back in full." However, as stated in the article, security is not created in exchange for rights and freedoms, but only together with them. This article emphasizes that the coexistence of rights and freedoms, on the one hand, and cybersecurity, on the other hand, is possible (Cyber security and/or human rights, 2018).

In democracies, the balance of rights and restrictions is set up in such a way that in order to exercise the rights of one, restrictions and obligations must be imposed on the other. This fully applies to the legal regulation of cyberspace. For example, one's desire to access information may be limited by the need to protect the other's personal data or trade secrets. Freedom of expression in cyberspace may be limited by the requirements of public morality. The desire to use pirated copies of audio and video products — the protection of intellectual property rights. According to prof. I.M. Sopilko, data leaks caused by cybersecurity gaps can have devastating consequences for any business. After all, this can undermine the company's reputation due to the loss of trust of consumers and partners. Also, leaking critical data can cost an organization its competitive advantage (Sopilko, 2021).

Thus, the problem of legal regulation of rights, freedoms and restrictions in cyberspace is relevant.

#### **MATERIALS AND METHODS**

In the scientific literature, cybersecurity and cybersecurity are associated with the rights and freedoms of citizens in a relatively small number of works. Article considers cybersecurity as a component of human rights information. The author's definition of the right to cybersecurity as an inalienable, inalienable right of a person to protect his important interests, including information rights, when using cyberspace. That is, the right to such a rule of law, which ensures, protects and defends human rights and freedoms when using cyberspace. It is proposed to include the right to cybersecurity to information human rights, but subject to appropriate legal regulation (Khobbi, 2020).

In the article concludes that at this stage of information technology development there is a threat to information security of Internet users. To achieve this complex task, the state needs to find a dynamic balance between freedom of speech, ensuring the right to information, its effective use as a means of civil society control over government actions, limiting the dissemination of classified information and maintaining moral and spiritual stability in society. Finding this balance will protect both the interests of society and the state, and promote the realization of the right of citizens to receive comprehensive and high-quality information (Yushchuk, 2009).

In the article among the components of cybersecurity policy, in particular, respect for fundamental values. All strategies place a strong emphasis on the need for cybersecurity policies to respect fundamental values, which typically include confidentiality, freedom of speech and the free exchange of information. Several strategies explicitly mention the need to maintain the openness of the Internet, and none of the strategies proposes to reduce openness in favor of enhancing cybersecurity. On the contrary, the openness of the Internet is usually described as a requirement for the further development of the Internet economy (Dziundziuk & Kotukh, 2020).

Recommendation CM / Rec (2016) 5 of the Committee of Ministers of the Member States on Internet Freedom (adopted by the Committee of Ministers on 13.04.2016 at the 1253rd meeting of the Ministers' Deputies) states that Internet governance mechanisms at national, regional or global level should be based on the understanding of Internet freedom. Any national decision or action aimed at restricting human rights and fundamental rights on the Internet must comply with international obligations and, in particular, be based on the law. Therefore, the stated topic is relevant. This issue has been partially investigated in the works of co-authors (Dziundziuk & Kotukh, 2020; Cherevatiuk et al., 2022).

#### **RESULTS AND DISCUSSION**

According to Art. 3 of the Constitution of Ukraine, man, his life and health, honor and dignity, inviolability and security are recognized in Ukraine as the highest social value. Human rights and freedoms and their guarantees determine the content and direction of the state. The state is accountable to the people for its activities. The establishment and protection of human rights and freedoms is the main duty of the state. Thus, the state policy in the field of cybersecurity as part of the state's activities is aimed primarily at ensuring the constitutional rights of citizens.

In particular, Professor G.V. Foros (2019) believes that although the 1996 Constitution of Ukraine, as in the constitutional legislation of most foreign countries, defines the definitions of "cybersecurity", "cybercrime" and derivatives, but the key task in this area of state activity, which fundamental rights of human beings, as enshrined in the relevant international agreements reaffirming the right of everyone to freedom of opinion and the right to freedom of expression, including the right to seek, receive and impart information and ideas regardless of frontiers., as well as the right to respect for private life, including in cyberspace (Foros & Zhohov, 2019). In particular, the authors emphasize that the cornerstone of one of the first regulations in this area— the Council of Europe Convention on Cybercrime of 23 November 2001—identified the need to strike the right balance between law enforcement interests and respect for fundamental human rights, as enshrined in the Council of Europe Convention<sup>4</sup>. on the Protection of Human Rights and Fundamental Freedoms of 1950, the United Nations International Charter of Civil and Political Rights of 1966 and other relevant international human rights treaties reaffirming the right of everyone to freedom of opinion, and the right to freedom of expression, including the right to seek, receive and impart information and ideas of all kinds, regardless of frontiers, and the right to respect for private life. The right to protection of personal information is also noted, as provided for in the 1981 Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data.

The basic legal act in Ukraine in the field of cyber security is the Law of Ukraine dated 05.10.2017 Nº 2163-VIII "On the basic principles of cyber security of Ukraine" (hereinafter—the Law Nº 2163-VIII). Thus, the preamble of this Law emphasizes that the Law defines the legal and organizational basis for protecting the vital interests of man and citizen, society and state, national interests of Ukraine in cyberspace, the main goals, directions and principles of state policy in cybersecurity, powers of state bodies. enterprises, institutions, organizations,

<sup>&</sup>lt;sup>4</sup> Конвенцію ратифіковано Україною із застереженнями і заявами Законом від 07.09.2005 № 2824-IV

individuals and citizens in this field, the basic principles of coordination of their activities to ensure cybersecurity. In paragraph 5 of Art. 1 of the Law Nº 2163-VIII cybersecurity is defined as the protection of vital interests of man and citizen, society and the state in the use of cyberspace, which ensures sustainable development of information society and digital communication environment, timely detection, prevention and neutralization of real and potential threats to national security in cyberspace.

According to Part 1 of Art. 3 of the Law № 2163-VIII, the legal basis for cybersecurity of Ukraine is the Constitution of Ukraine, laws of Ukraine on the basics of national security, principles of domestic and foreign policy, electronic communications, protection of state information resources and information required by law, this and other laws Ukraine, the Convention on Cybercrime, other international treaties approved by the Verkhovna Rada of Ukraine, decrees of the President of Ukraine, acts of the Cabinet of Ministers of Ukraine, as well as other regulations adopted in pursuance of the laws of Ukraine.

Thus, as noted above, the activities of the Ukrainian state in the field of cybersecurity are based on the Constitution of Ukraine and the Convention on Cybercrime, in particular, in the context of ensuring the constitutional rights of citizens. According to paragraph 1 of Part 1 of Art. 4 of the Law № 2163-VIII, the objects of cybersecurity are: constitutional rights and freedoms of man and citizen. According to Part 3 of Art. 5 of the Law № 2163-VIII, the Cabinet of Ministers of Ukraine in the field of cybersecurity ensures the formation and implementation of state policy in the field of cybersecurity, protection of human and civil rights and freedoms, national interests of Ukraine in cyberspace, fight against cybercrime; organizes and provides the necessary forces, means and resources for the functioning of the national cybersecurity system; formulates requirements and ensures the functioning of the information security audit system at critical infrastructure facilities (except for critical infrastructure facilities in the banking system of Ukraine). According to paragraph 1 of Part 1 of Art. 7 of the Law № 2163-VIII, cybersecurity in Ukraine is based on the principles of: 1) the rule of law, legality, respect for human rights and fundamental freedoms and their protection in the manner prescribed by law.

In pursuance of the provisions of this Law, the National Security and Defense Council (NSDC) of Ukraine adopted a decision of 14.05.2021 "On the Cyber-Security Strategy of Ukraine", which (Strategy) was approved by the Decree of the President of Ukraine of 26.08.2021 Nº 447/2021 Strategy). Chapter 4 "National Cyber-Security System: Principles of Development" of this Strategy emphasizes that Ukraine seeks to create the most open, free, stable and secure cyberspace in the interests of human rights and freedoms, social, political and economic development. Ukraine will build a national system of cybersecurity, based, in particular, on the balanced provision of the needs of the state and the rights of citizens, the rule of law, respect for fundamental values, human and civil rights. Section 5 "Priorities of Cyber Security of Ukraine and Strategic Goals" of the Strategy prioritizes cyber security of Ukraine, in particular, the protection of cyberspace to protect the sovereignty of the state and the development of society; protection of the rights, freedoms and legitimate interests of the citizens of Ukraine in cyberspace.

In Section 3 "National Cyberspace: Challenges and Cyber Threats" Strategies are identified as threats to Ukraine's cybersecurity:

- hybrid aggression of the Russian Federation (RF) against Ukraine in cyberspace. The aggressor state is constantly increasing the arsenal of offensive cyber weapons, the use of which can cause irreparable, irreversible destructive consequences. Cyber-attacks of the Russian Federation are aimed primarily at information and communication systems of state bodies of Ukraine and objects of critical information infrastructure in order to disable them (cyber diversion), gain covert access and control, intelligence and intelligence activities. Cyberattacks are also actively used by the aggressor state as an element of special information operations aimed at manipulating the population, interfering in electoral processes and discrediting Ukrainian statehood; cybercrime, which harms information resources, social processes, personally citizens, reduces public confidence in information technology and leads to significant material losses. The use of cyberspace to commit crimes against the national security of Ukraine, as well as criminal offenses related to money laundering, trafficking in human beings, illicit handling of weapons, ammunition or explosives, illicit trafficking in narcotic drugs and psychotropic substances is becoming widespread., their analogues or precursors and other objects and substances that threaten human life and health, etc.;
- organized and sponsored by governments of other states cyberattacks related to the theft for political, economic or military purposes of sensitive information (cyber espionage) and the implementation of intelligence and subversive activities. Features of such cyberattacks are their duration, complexity and hidden nature, which complicates their prevention, detection and neutralization;
- $-\,$  use of cyberspace by terrorist organizations to commit acts of cyberterrorism, financial and other support for terrorist activities.

The defense component of cybersecurity is described, in particular, in the Strategy of Military Security of Ukraine, adopted by the National Security and Defense Council on March 25, 2021 and approved by the Decree of the President of Ukraine of March 25, 2021 № 121/2021. As stated in this Strategy, "at the national level, the Russian Federation remains a military adversary of Ukraine, carrying out armed aggression against Ukraine, temporarily occupying the territory of Ukraine, systematically using military, political, economic, informational, psychological, space, cyber and other means. that threaten the independence, state sovereignty and territorial integrity of Ukraine. "

As noted by I.R. Maltseva (with co-authors), cybersecurity— one of the most important components of the entire defense system in the armed forces of Ukraine (Maltseva et al., 2020). A. Khudoliy (2019) emphasizes that in recent years cyber security has become a priority for the modern army. Active hybrid warfare, which accompanies the physical phase of hostilities, is forcing the Ukrainian military to intensify efforts in this direction (Khudolii, 2019). The aggressor actively uses cyberspace not only against Ukraine, but also against other states. The article mentions cyberattacks as a threat to the country's defense. The latter is especially clearly confirmed after the beginning of the large-scale armed invasion of the Russian Federation into Ukraine on February 24, 2022. Thus, according to the American company Microsoft, since the beginning of the war, Russian hackers have committed almost 240 cyber-attacks against Ukraine— businesses and government agencies. Attacks were often aimed at destroying computer systems, but some were also aimed at gathering intelligence or spreading misinformation.

Another component of cybersecurity threat in Ukraine is cybercrime. It was noted above that Ukraine has ratified the Council of Europe Convention on Cybercrime of 23 November 2001. The Convention states that the fight against cybercrime is dictated, in particular, by the need to protect legitimate interests in the use and development of information technology. In particular, the Convention identifies the following types of cybercrime:

— offenses against the confidentiality, integrity and availability of computer data and systems (illegal access, illegal interception, data interference, system interference, device abuse).

The criminalization of these illegal actions ensures the rights of individuals to collect, store, use and disseminate information, access to reliable and objective information;

— computer-related offenses (computer-related counterfeiting; computer-related fraud). The criminalization of these illegal actions ensures the rights of individuals to preserve the inviolability of those rights that are recorded in computer systems, such as the inviolability of credentials on property rights, or credentials on individuals' money accounts or securities accounts, and so on. For example, according to Russian data, on April 12, 2022 it became known that in 2021 fraudsters stole 13.5 billion rubles from bank customers, making more than 1 million unauthorized transfers from bank cards and accounts. From these funds, banks were able to return to the affected citizens of only 6.8%, or 920 million rubles (Russian hackers have launched..., 2022; Losses of banks from cybercrime, 2022). The level of refunds is falling for the second year in a row amid rising thefts. At the same time, it is reported that in Ukraine there are quite high rates of cybercrime detection in the banking sector— up to 80% of stolen funds are returned to the owners;

— Offenses related to child pornography (development of child pornography for distribution through computer systems; offering or providing access to child pornography through computer systems; distribution or transmission of child pornography through computer systems; obtaining child pornography using computer systems for oneself or another person; possession of child pornography in a computer system or on a computer medium).

At the same time, the Convention on Cybercrime explicitly states that the criminalization of these actions is aimed at protecting the rights of children in accordance with the UN Convention of 20.11.1989 (New York). Under Article 34 of this Convention, States Parties have an obligation to protect the child from all forms of sexual exploitation and sexual abuse. To this end, States Parties shall, in particular, take all appropriate measures at the national, bilateral and multilateral levels to prevent: (a) The incitement or coercion of a child to engage in any unlawful sexual activity; (b) The use of children for the purpose of exploitation in prostitution or other unlawful sexual practices; (c) The use of children for the purpose of exploitation in pornography and pornographic materials;— offenses related to copyright and related rights infringement.

This requirement is aimed at protecting the intellectual property rights of the copyright and related rights in accordance with the Paris Act of 24.07.1971 on the Berne Convention for the Protection of Literary and Artistic Works, the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome Convention), The Agreement on Trade-Related Aspects of Intellectual Property Rights and the WIPO Copyright Agreement.

Internet piracy is the illegal distribution of intellectual property on the Internet. The essence of Internet piracy is the reproduction and distribution on the Internet of films, musical works, computer programs, other intellectual property, without the permission of the author or another person who has copyright and / or related rights, or without payment of remuneration for use of works in the manner prescribed by law. In the legislation of Ukraine, the definition of Internet piracy is given in Article 50 "Infringement of copyright and related rights" of the Law of Ukraine "On Copyright and Related Rights": Internet piracy is the commission of any actions recognized as copyright infringement and (or) related rights using the Internet (paragraph b of Article 50). Internet piracy is global, it cannot be defeated in a single country. But the world community and each country are trying to develop an effective mechanism for simplified and accelerated copyright protection on the Internet. The following international acts are aimed at this: the EU Directive "On e-Commerce" № 2000/31 / EU of 08.06.2000; EU Directive "On Copyright in the Digital Single Market" № 2019/790 / EU of 17.04.2019.

In terms of international cooperation, we should agree with the opinion of Yu.S. Razmetaeva, who believes that the prevention of cyber threats is possible through a combination of national and international cyber defense strategies (Razmietaieva, 2015). Therefore, the combination of national and international cybersecurity strategies, dynamism is the way that leads to cyber security, including the prevention of conflicts in the information sphere. One can fully agree with the thesis that both hardware protection and software protection are the main tasks of cybersecurity. However, both types of protection must be implemented and integrated into national and international strategy (regulation) in order to achieve their goals" (Maskun, 2013).

#### **CONCLUSIONS**

Legal regulation of cybersecurity in Ukraine is based on the requirements of striking a balance between information protection and freedom of expression, the position of the United Nations and the case law of the European Court of Human Rights. The balance is based on a reasonable combination of restrictions on access to information or its distortion, distortion in the process of "information warfare" and ensuring constitutional rights and freedoms to collect, store, use and disseminate information, access to reliable and objective information, personal data protection, public morality and counteraction to infringements of intellectual property.

#### REFERENCES

Cherevatiuk, V.B., Bielkin, L.M., Sopilko, I.M., & Yurynets, Yu.L. (2022). The question of the balance between information protection and ensuring the rights of individuals in the regulation of cyber security under the legislation of Ukraine. Modern Aspects of Science: XX. Part of the international collective monograph / International Economic Institute. Czech Republic: International Economic Institute, 601-609. Retrieved from: http://perspectives.pp.ua/public/site/mono/monography-20.pdf

Cyber security and/or human rights. (2018, June 6). ALL-UKRAINIAN ASSOCIATION INFORMATION SECURITY AND INFORMATION TECHNOLOGIES. Retrieved from: https://cutt.ly/21cp8VP

Dziundziuk, V.B., & Kotukh, Ye.V (2020). Cyber security as one of the priorities of national policy. State Construction, 2.

Foros H.V.,& Zhohov V.S. (2019). Peculiarities of the interpretation of the concept of «cyber security» in modern legal science. *Constitutional State*, *33*, 128-134.

Khobbi, Yu. (2020). The human right to cyber security: problems of definition and guarantee. *Legal Bulletin*, 2, 37-43

Khudolii, A. (2019). Cyber security: modern challenges for Ukraine. *Acta de history & politics: saeculum XXI,* 1, 138-146.

Losses of banks from cybercrime (2022). TADVISER. Retrieved from: https://www.tadviser.ru/index.php/Statia:Potery\_bankov\_ot\_kyberprestupnosty

Maltseva, I.R., Chernysh, Yu.O., & Cherednychenko, O.Iu. (2020). Cyber security is one of the most important components of the entire defense system in the Armed Forces of Ukraine. *Cyber Security: Education, Science, Technology*, 1.85-92.

Maskun, S.H. (2013). Cyber Security: Rule of Use Internet Safely. *Journal of Law, Policy and Globalization*, 15, 22. Razmietaieva, Yu.S. (2015). The international security system in the light of cyber threats: legal problems and prospects. *Actual Problems Of Modern International Law:, Kharkiv.* 1, 175-177.

Russian hackers have launched almost 240 cyberattacks against Ukraine since the beginning of the war—Microsoft. (2022). Retrieved from: https://www.slovoidilo.ua/2022/04/28/novyna/bezpeka/rosijski-xakery-pochatku-vijny-skoyily-majzhe-240-kiberatak-proty-ukrayiny-microsoft.

Sopilko, I.M. (2021). Information security and cyber security: a comparative legal aspect. *Scientific Works Of NAU. Series: Legal Bulletin Air And Space Law, 2*(59), 110-115.

Sopilko, I.M. (2021). Peculiarities of combating cyberthreats with legal methods and means. *Scientific Works Of NAU. Series: Legal Bulletin Air And Space Law, 4*(61), 105-110.

Yushchuk, O. (2009). Information security of Internet users. *Scientific notes of the National University «Ostroh Academy»*. *Series: Culture and social communications*, 1, 224-231

## POSSIBILITIES AND LIMITATIONS IN THE APPLICATION OF THE GREEN PLAN FOR SSS SHIPS FROM THE ASPECT OF IMPROVING THE QUALITY OF PROPULSION SYSTEMS

Tomislav Bukša Jadrolinija 16 A. Riva Str., Rijeka, Croatia, 51000 https://orcid.org/0000-0003-4915-8573

#### Juraj Bukša

Faculty of Maritime Studies, University of Rijeka 2 Studentska Str., Rijeka, Croatia, 51000 https://orcid.org/0000-0002-9121-5706

#### Gordana Nikolić

PAR University Rijeka 4 Rijeka resolution Square, Rijeka, Croatia, 51000 https://orcid.org/0000-0001-7578-803X

**Abstract.** The article studies the ways to achieve complete decarbonization of the SSS fleet in accordance with the IMO Strategy and the Green Plan for Europe 2050. Therefore, experts from the fields of shipping, shipbuilding, mechanical engineering, energy, technology, human resources management, logistics, maritime law, occupational safety and ecology assessed the selected elements of the quality of propulsion systems on ships. During the study, the sizes of these elements for the target year 2050 were numerically estimated. As a result, a matrix of development was created in relation to the current situation by which it is possible to determine their synergistic effect and the individual impact on other elements. The results of the research have shown that there is a real possibility of achieving the set goals if the values of individual quality elements of propulsion systems are improved.

**Keywords:** quality of propulsion systems, alternative fuels, short seal shipping, growth matrix.

#### INTRODUCTION

The quality of reliability of ship propulsion maintenance has been brought to an enviable level of safety during the long-term operation of coastal liner ships powered by internal combustion engines. With the advent of new propulsion systems that use alternative fuels, problems can be expected related to the specifics of the areas in which short sea shipping takes place.

The issue of transformation of propulsion systems of SSS fleet ships in terms of decarbonization, i.e. the use of environmentally neutral fuels and thus zero greenhouse gas emissions, is analyzed in this paper exclusively from the point of view of sustainability and

reliability without entering the economic and political sphere of decision-making. Namely, the research starts from the preamble of the European Green Plan (EC, 2019) as a given goal, the achievement of which opens space for numerous variations on the topic of selection of propulsion and fuel for which ship owners or ship owners will opt. Coastal liner shipping has the purpose of transversal or long-shore connection of points (ports) on the coast or islands for the transport of passengers, goods and vehicles according to a predetermined sailing schedule (Bukša & Bukša, 2011). It takes place continuously with frequency in the function of transport demand and is interrupted only exceptionally depending on hydrometeorological conditions. Navigation is exposed to maritime risks related to system factors and circumstances (Bukša, 2010).

The genesis of the reliability quality problems of new propulsion systems and alternative fuels stems from ubiquitous efforts to reduce greenhouse gas emissions in maritime transport, which in turn have triggered market competition for dominance in the marine propulsion industry. The evident climate change and the Green European Plan have prompted many manufacturers of environmentally friendly machines, innovators in the supply of environmentally friendly fuels, to offer a range of propulsion systems to the market in the euphoria of general decarbonization, most of which are still in the experimental phase. Ship owners are gradually introducing new technologies on their vessels in accordance with their market, geographical and climatological position. Ship owners from Scandinavian countries and Germany went the furthest in this, using dual fuel, hybrid diesel-battery or LNG-battery and battery ships on shorter lines that are not exposed to wind and sea shocks. Larger ship owners, those with dozens of vessels, are still hesitant to procure new vessels, awaiting relevant research into the functional characteristics of such vessels under various operating loads as well as appropriate logistical support for fuel supply, battery replacement, spare parts delivery, etc. Ship owners' thinking is perfectly acceptable. to manage fuel and lubricant costs and maintain the reliability of the propulsion system. Also, ship owners manage the renewal of the fleet looking for optimal solutions and select the maritime properties of the ship as well as the propulsion machine in accordance with the climatological, meteorological and tide gauge characteristics of the area in which they sail. Optimistic demands for a complete renewal of the fleet of ships in the SSS system by 2050 require the selection of leading technology to adapt the accompanying fuel supply industry or battery charging stations, shipyards, spare parts supply, crew training and customized maritime colleges.

From fuel to ship moving, the overall energy conversion efficiency consists of three parts (Shi et al., 2010): "the engine efficiency, the transmission efficiency and the propulsive efficiency. In off-design conditions, there are three factors, namely the engine speed, the propeller pitch ratio and the rudder activity, and an additional disturbance, ship loading factor that can impact the behavior of ship propulsion system and influence the overall energy conversion efficiency" The basic goal of this research is to improve the quality of propulsion systems in terms of:

- reducing and eliminating GHG emissions;
- noise reduction and elimination in engine rooms and on board;
- reducing and eliminating the release of oily liquids from the ship and
- maintaining the reliability of propulsion systems,

that is, the search for the implementation and manner of using alternative propulsion and fuel on SSS ships, without violating the existing standards of transport service.

Improving the quality of propulsion systems set by IMO strategic documents and the Green Plan exposes SSS ship owners to additional costs of transformation of existing or procurement of new propulsion systems, costs of sustainable development, costs of LCC as well as costs of environmentally neutral fuels.

Conventional life cycle costs (LCC) are based on four categories that are estimated based on the costs of investment, operation, maintenance and disposal at the end of life, while the LCC method in the environment considers the above-mentioned costs and external environmental costs. Given that maritime operations contribute significantly to global warming and environmental pollution, it is necessary to consider the life-cycle costs of vessels from an environmental point of view, which include reducing greenhouse gas emissions and end-of-life environmental management of vessels.

#### **MATERIALS AND METHODS**

The Green Plan for Europe as an ecologically neutral continent until 2050 is a challenge that, in addition to benefiting future generations, is associated with additional costs for those existing. The new costs that will result from this relate to the costs of transforming or replacing existing propulsion systems as well as all processes that use fossil fuel energy and which need to be replaced by alternative environmentally neutral fuels. In this context, the position of SSS ship owners facing the challenge of transforming or replacing propulsion systems on their ships in order to meet the given decarbonization conditions should be observed.

The problems observed relate primarily to the time period in which they should adapt their fleet to the Green Plan, given the specifics of maritime transport, in which alternative propulsion and associated fuels should not be a limiting factor in maintaining safe maritime service in liner coastal transport. Namely, the replacement of existing ships at larger ship owners (30 to 50 vessels) requires time and capacity of overhaul and construction shipyards.

Another problem is a stable fuel supply, safe boarding and compliance with safe use regulations. The third challenge are the external factors, i.e. the sea and the wind, whose power and direction affect the additional loads of the propulsion system, which must fulfil the function of propulsion of the ship even in extreme conditions.

The complexity of finding solutions goes beyond the capabilities of SSS ship owners and requires a multidisciplinary approach that should consider the knowledge and experience of experts in shipping, shipbuilding, mechanical engineering, energy, technology, human resources management, logistics, maritime law, occupational safety and ecology. Considering the above, the key elements of the development of propulsion systems for the target times in 2030 and 2050 were identified and a survey of opinions and attitudes of experts in these areas on the projection of those elements of development that participate in improving the quality of propulsion systems on SSS.

The transition period until 2050, for the transition to environmentally neutral propellants, is a necessity arising from insufficiently researched technology of supply of ecologically neutral energy sources and thus the choice of ship propulsion. In addition, it should be

considered that between the decision of the ship owner which installation and which energy source to use and the beginning of operation, it is necessary to consider the free capacities of the shipyard, the capacity of making propulsion machines and the fuel supply schedule to each port of Short sea Shipping – SSS (Bukša, 2005).

SSS vessels typically operate in limited geographical areas, on relatively short routes with frequent port calls. Due to their relatively low energy demand, these vessels are often ideal candidates for testing new fuels characterized by high energy or fuel storage costs (Sopta et al., 2020).

The SSS fleet in the EU, with the exception of inland waterway vessels, makes up a respectable number of vessels that should be replaced or refurbished over a thirty-year period in accordance with the requirements of environmental neutrality of energy (NMA, 2017).

Possible scenarios for the transformation of SSS fleet marine propulsion systems have been proposed by Sopta et al. (2020). According to them, three scenarios are possible for propulsion systems powered by environmentally friendly fuels with a set target system—zero emissions by 2050.

Possible scenarios according to default milestone

Table 1.

UP TO 2030.	UP TO 2050.				
Development of internal combustion	Hydrogen as a propellant for marine				
propulsion systems:  a. development of dual fuel system— diesel	propulsion systems: indirect— use of hydrogen fuel cells to start				
fuel and LNG  b. development of LNG-powered systems  c. development of hydrogen-powered systems	electric motors and direct— the use of hydrogen as a gas in internal combustion engines.				
Development of electric propulsion systems: development of hybrid systems— diesel and electric power development of electrical systems— batteries electrical system development— batteries + hydrogen cells	All other energy needed to maintain the ship's systems is obtained from renewable sources on board—photovoltaic cells, wind farms				

Source: authors' adaptation according to Sopta et al. (2020)

The transition further, as stated in the DNV GL – Maritime. (2020), opens the issue of safety of alternative fuels, but also the issue of investing in low-carbon shipping.

#### a) Safety issues of alternative fuels

Most alternative fuels are gases or liquids with a significantly lower flashpoint than conventional fuel oils and will, unlike conventional fuel oils, create an explosive gas atmosphere in an enclosed space unless properly contained. Some alternative fuels are also toxic to humans in small quantities and in low concentrations, and some are stored at very low temperatures, adding to the challenge of integrating a safe storage and distribution system. On the positive side, many have a substantially higher auto-ignition temperature than fuel oils (DNV-GL, 2020).

Storage of gaseous fuels in liquefied form will require control of temperature and/or

pressure in the storage tanks. Due to the high energy content, damage to storage tanks can have potentially catastrophic consequences. The differences in properties and associated hazards for alternative fuels require additional safety barriers to maintain the safety level when compared with conventional oil fuel. Each alternative fuel has its unique properties and associated hazards requiring special consideration (DNV-GL, 2020).

#### b) Investment issues of low-carbon shipping

Ship owners have conventionally gravitated towards solutions that are cheaper, more reliable, more efficient, and which demand less space onboard. Going forward, owners will still favor such solutions. The challenge is that solutions intended to reduce global maritime GHG emissions are typically more expensive, less mature, less efficient and require more space onboard.

Ship owners making the decision to deploy new, improved technologies and fuels will not risk investing in immature solutions. A number of actions can help to ensure demand for shipping powered by carbon-neutral fuels, thereby reducing market and regulatory risks and accelerating uptake of the fuel (DNV-GL, 2020): International, regional, national and local regulations will be the key drivers to incentivize uptake of new solutions. This covers both technical requirements and pricing mechanisms. Supportive green procurement policies from both public and private cargo-owners, combined with long-term contracts, will enable investments in ships powered by carbon-neutral fuels.

The answers to these questions depend heavily on compliance with the projected GHG emission limits with the SSS, which in turn depend on the development of the technologies needed for new generations of low-carbon ships.

The results of this research are based on face-to-face in-depth interviews conducted with experts in the fields of shipping, shipbuilding, mechanical engineering, energy, technology, human resources management, logistics, maritime law, occupational safety and ecology in the Croatian maritime industry. Purposeful sampling was used for selecting the participants. Basically, interviewees were approached both personally and by formal email where individual interview requests have been sent. Later, snowballing strategy has been applied in order to approach the most fitting personnel for the sake of this research.

The sample consisted of 28 participants and the research was conducted in two stages. In the first stage, participants from the maritime industry were approached. 19 participants were a mix of different professions and working at different levels; three general managers, three human resources managers, two security managers, two front office managers and seven non-supervisory staff. In the second stage, the research extended to key outsider players from both the public and service sector. The variations in participants' profiles enrich the revealed data.

Although all participants are from the Croatian maritime sector, the interview questions have been deliberately formulated for each participant. Understanding the variances among participants in terms of their job description, management level, authority and alternative fuel knowledge entails altered research interviews.

Notwithstanding the revealed data from each participant contributes to fulfilling the research objectives. Ironically the variances among participants' profiles support the understanding of the GHG problem from different perspectives and hence a more integrated approach.

In order to design a model of growth and development of quality improvement elements of propulsion systems, a growth matrix was used which in a specific way takes into account the structural relationship of quality improvement elements, as presented by Stojanović (1990). Their structural relationship is specific due to the fact that the development elements depend on each other and their relevance for the development potential should be monitored simultaneously by taking into consideration direct and indirect growth rates. The growth matrix has been used as a base for mathematical modelling of the development potential by Pupavac and Zelenika (2007) in their research, and over time it has lived up to expectations.

## A PROJECTION OF ELEMENT DEVELOPMENT FOR IMPROVING THE QUALITY OF PROPULSION SYSTEMS ACCORDING TO THE GREEN PLAN FOR SHORT SEA SHIPPING

The projection of the development of elements characteristic for the implementation of the Green Plan in the PRS system is based on the selection of key elements of development, their evaluation in the current moment in 2021 and the projection for 2030 as the reference IMO year and the projection for 2050 as the reference year of zero greenhouse gas emissions.

Projection of the development of elements in the model of improving the quality of propulsion systems in the SSS according to the targeted excellence to be achieved.

In devising a projection of model elements, the current condition of the model elements (in 2021) was considered and each element was given a numeric value (on a scale from 1 to 10), i.e. an input estimating its importance for quality greenhouse gas emissions from SSS ships management. The evaluation for 2030 has been made empirically, i.e. by conducting interviews with experts in shipping, shipbuilding, mechanical engineering, energy, technology, human resources management, logistics, maritime law, occupational safety, ecology and controlling.

In order to reach the performance needed for the application of the IMO Strategy, it is estimated that with a systematic application of quality propulsion system improvement it would take a period of at least ten years for the SSS carrier to be ready for a fair market match with direct competitors. Therefore, the estimated element values for the IMO Strategy can be expected in 2030.

However, in order to become a leader in the SSS market, it is necessary to start the process of procuring new ships powered by environmentally neutral fuels to meet the requirements of environmental neutrality by 2050. The experience of the automotive industry, which has carried out business reengineering and is gradually replacing internal combustion engines with electric drives using batteries or hydrogen fuel cells, indicates that a period of 30 years is required to achieve a high degree of excellence in such drives.

Therefore, for the Green Plan scenario, it is possible to forecast the values of the elements only with the condition of a complete transition to electrically powered ships and a change in business philosophy that would take into account the functions of quality and controlling.

That input is crucial in order to be able to determine direct and indirect growth rates of all the management elements in a quality improvement system using a growth matrix.

The first prediction period from 2021 to 2030 (a ten-year period) has been chosen for the following reasons:

- In accordance with the Initial IMO Strategy on reduction of GHG emissions from ships (IMO, 2018) on reduction of CO2 emissions in maritime transport by 40% compared to 2008, it is certain that ship owners are allowed to use alternative fuels on existing propulsion engines in the transition period with certain modifications. This primarily involves the use of natural gas, ammonia and hydrogen and hybrid propulsion machines dual fuel, diesel / batteries, LNG / batteries, diesel / hydrogen cells. The transition period until 2030 is used for the education of seafarers, modifications to propulsion engines, construction of new ships in accordance with technical and technological development, construction of infrastructure for fuel supply.
- The period of 10 years of planning in the maritime and shipbuilding industries is included in the medium-term plans, which are considered principle development plans because they do not contain specific technical characteristics but are adjusted in accordance with the development of ship propulsion technology.
- A period of 30 years (until 2050) is considered long-term planning and usually serves as a starting point for the adoption and determination of medium-term development plans.
   These plans determine the general orientation of the development of improving the quality of propulsion systems and development guidelines and changes in business.

In order to forecast the values of elements in 2050 as accurately and objectively as possible in relation to 2021, their growth is analysed and compared with the projected values (inputs) of elements in 2030.

## CALCULATION OF GROWTH RATES OF DEVELOPMENT ELEMENTS FOR THE PLANNED PERIOD UNTIL 2050

To adequately quantify and examine the growth of development potentials for improving the quality of propulsion machines in the SSS fleet, a growth matrix was used that treats the structural relationships of development elements in a specific way (Stojanović, 1990). It is due to the fact that development elements are interdependent and their role in the growth potential should be monitored simultaneously through direct and indirect growth rates.

After the basic characteristics of a growth matrix have been analyzed and a model has been devised, it is possible to apply shipbuilding company product quality improvement development model element values to the model and create a growth matrix of that model. The effects of a shipbuilding company product quality improvement development model based on a growth matrix are manifold:

- a growth matrix provides an opportunity to cover all internal and external factors influencing the quality of the propulsion systems of the shipping company SSS at the same time;
- the model elements are interdependent and their variations should be observed simultaneously through direct growth rates;
- it is possible to demonstrate the relationship between different elements through appropriate rows and columns showing synergic effects of the model;
- each row or column in the growth matrix shows how one element relates to the others, including parameters that identify direct growth rates, i.e. individual model effects.

The results obtained by designing the model, evaluating its elements and testing can be

divided into individual and synergistic effects thanks to the results obtained through direct and indirect growth rates. The model contains the element values used in 2021 and their predicted values for 2030 and 2050.

## EVALUATION OF ELEMENTS OF DEVELOPMENT OF IMPROVING THE QUALITY OF PROPULSION SYSTEMS ON SSS SHIPS

The questionnaire asked maritime experts to assess (in the range of 1-10) the current value of each element and knowledge of the general situation in maritime affairs, trends in the search for environmentally neutral ships in the SSS, new construction market, technological advances in ship development, production technology, environmentally neutral fuels and developments in society and the economy, and to project the future value of these elements for the next 10 and 30 years, respectively.

- 1. Expertise and motivation of human resources in the PRS was assessed with an average grade of 7, with a projection for 2030 of 7 and for 2050 also a grade of 7. This expressed lack of growth can be interpreted by the general situation in liner coastal shipping with pronounced seasonality, the absence of market competition, the ownership structure with a stagnant perspective due to opportunities in society and the education system;
- 2. Acceptance (understanding) of the necessity of abandoning conventional propulsion machines and transformation to environmentally neutral plants for the purpose of preserving the natural environment and preventing climate change was rated for the time being with a high average score of 8. Experts predicted that awareness of the harmful effects of fossil fuels will grow, for 2030 it was rated with an average grade of 9 and to be fully accepted in 2050 (grade 10);
- 3. The reliability of alternative drives is an element that evaluates the general applicability of new technological solutions that are currently, with the exception of dual fuel, in the experimental phase. Therefore, the evaluation of this element by connoisseurs is quite reserved. Thus, the reliability of alternative drives for 2021 was rated at four (grade 4) with a development perspective until 2030, which was rated with an average grade of 6, and in the target 2050 with a grade of 8. This skepticism is explained by insufficient information on the use of such drive systems;
- 4. Availability of motor fuel with less or no greenhouse gas content. The availability of gas as an alternative fuel for ships in the SSS system is practically the same as diesel fuel. The same is the case with electricity for charging rechargeable batteries (if the electricity is produced from renewable sources). However, the availability of ammonia, hydrogen, and hydrogen cells will not be possible in every port of call for SSS ships for the foreseeable future until cost-effective transport and storage solutions are found. Respondents obviously thought in this direction as well, considering that they assessed the existing availability with an average grade of 7 and the development until 2030 with a grade of 8, and awarded the same grade in 2050;
- 5. The quality of the maritime transport service in the PRS system is an element that has been assessed almost in unison for the present and the future, with a high average score of 8, considering that the type of ship propulsion cannot significantly affect the transport service.

- 6. The quality of environmental protection due to the release of GHG from SSSs is recognized as a need and desire due to the obvious climate change and is considered an imperative. In this sense, the respondents also assessed the current situation with a grade of 5 with a progression to 8 for 2030 and to a grade of 10 for the target year 2050;
- 7. Working and space conditions are elements whose progress is limited by the space of the engine room, the changes of which are possible only with large investments, and accordingly modest growth is foreseen. In 2021, it was evaluated with an average grade of 4, and the same value is forecasted for 2030, but in 2050, in the conditions valid for Scenario III, it will increase to 5, which makes an overall increase of one point.
- 8. The technological level is an element for which growth is expected within the development of the entire maritime transport sector, that is from 7 in 2021 to 8 in 2030 and 9 in 2050, which would make a total increase of 2 points;
- 9. The IT level is a necessity that must be achieved in order to achieve a higher quality of service and environmental protection, and from the current 5 in 2021, growth is projected to 8 in 2030 and 10 in 2050, which would make total increment of 5 points;
- 10. The business policy of the shipping company is an element that is crucial for the development of product quality, because the policy pursued by the management depends on the abyss of transformation into environmentally neutral plants. Experts believe that the current business policy can be evaluated with an average score of 6, which is conditioned by the current economic situation (COVID 19 crisis) and a forecast of 7 for 2030 and 8 for 2050;
- 11. Fleet integration is a development element specific to multi-vessel ship owners in the PRS service that largely depends on the availability of new technologies. Successive procurement of new vessels can lead to the emergence of different technologies within the fleet of the same ship owner, which will result in increased maintenance costs. Therefore, this element was carefully (with a certain reserve) evaluated, so the evaluations for 2021 are 5, 6 for 2030 as well as for 2050;
- 12. Ethics and social responsibility are an element that is unavoidable in all proverbial activities and refers to socially acceptable behavior that is often neglected in projecting business costs and thus quality. Experts considered that there was little room for improvement in this element and evaluated 2021 with a score of 6, and 2030 and 2050 with a score of 7;
- 13. Sustainable development costs are an element that has a significant upward trend but is necessary to maintain the level of transport services in line with the concept of sustainable development. Experts believe that these costs will grow until the cycle of transformation of the propulsion on all vessels is completed. Thus, the score rises from an average of 5 in 2021 to 7 in 2030 and 9 in 2050;
- 14. The life cycle costs of a ship LCC are the element that accompanies the ship from the shipyard to the cutting or waste disposal in an environmentally friendly manner. The cost of LCC by its definition grows along a normal curve with its peak at the time of full operation of the ship. In the observed case, the costs of LCC will increase with the need to replace the propulsion machines or to leave operation early and send to the cutting site. In that sense, there were also the ratings of this development element, which was rated 5 in 2021, to reach 8 in 2030, and 9 in the 2050 projection;

15. Controlling is an element that controls, measures, regulates and balances the relationship between the costs of plant quality and the consequences for the environment. This element is of great importance for achieving optimal costs for the best quality. Experts have recognized the value of this element and believe that its impact in the future will be crucial to achieve the desired quality of ship propulsion. Thus, the score rises from an average of 5 in 2021 to 7 in 2030 and 9 in 2050.

#### RESULTS AND DISCUSSION

A scientifically based assumption is that the development potential for improving the quality of propulsion systems on SSS ships consists of n interrelated elements. The value (e.g. as input) of the i-th development element (i = 1, ..., n) in the period t and t-1 will be marked as yit and yi,t-1. The input value growth of the i-th element of product quality improvement development the potential for improving the quality of propulsion systems on SSS ships:

$$\Delta y_{it} = y_{it} - \Delta y_{it-1} \tag{1}$$

The indirect i-th element growth rate of the product quality improvement development potential for improving the quality of propulsion systems on SSS ships in relation to the j-th is defined as the ratio of the i-th element input growth of the product quality improvement development potential in the shipbuilding industry,  $\Delta$ yit, to the input of the j-element of the product quality improvement development potential for improving the quality of propulsion systems on SSS ships in the t period, namely:

$$r_{iit} = y_{it} / y_{it} i, j = 1, ..., n. Y_{it} \neq 0.$$
 (2)

Based on the data from Table 2, it is possible to determine the growth matrix for the model elements of product quality improvement development potential for improving the quality of propulsion systems on SSS ships in relation to the current and future values in the period from 2021 to 2050.

Table 2. **Evaluation of development elements** 

	EVALUATION OF DEVELOPMENT ELEMENTS	Input Yit			Growth
		2021	2030	2050	Δyi, 2050
1.	HR expertise and motivation	7	7	7	0
2.	Acceptance (understanding) of the necessity of abandoning conventional propulsion machines	8	9	10	2
3.	Reliability of alternative drives	4	6	8	4
4.	Availability of alternative fuels	7	8	8	1
5.	Quality of maritime transport service in the PRS system	8	8	8	0
6.	Quality of environmental protection due to GHG discharge from SSS ships	5	8	10	5
7.	Working and space conditions	4	4	5	1
8.	Technological level	7	8	9	2
9.	IT level	5	8	10	5
10.	Business policy of a shipping company	6	7	8	2
11.	Fleet integration	5	6	6	1
12.	Ethics and social responsibility	6	7	7	1
13.	Sustainable development costs	5	7	9	4
14.	LCC life cycle cost	5	8	9	4
15.	Controlling	5	7	9	4

Source: Calculation based on data survey questionnaire

Growth matrix = growth vector × reciprocal values vector, i.e.:

$$R_{2050} = \Delta y'_{2050} \cdot \frac{1}{y_{2050}}$$

$$R_{2050} = \begin{bmatrix} 0\\2\\4\\1\\0\\5\\1\\2\\1\\1\\4\\4\\4 \end{bmatrix} \cdot \begin{bmatrix} \frac{1}{7}, \frac{1}{10}, \frac{1}{8}, \frac{1}{8}, \frac{1}{10}, \frac{1}{5}, \frac{1}{9}, \frac{1}{10}, \frac{1}{8}, \frac{1}{6}, \frac{1}{7}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9} \end{bmatrix}$$

$$(3)$$

The product of the external vector  $\Delta y'(2050)$  and 1/y(2050) determines the matrix of the development potential for improving the quality of propulsion systems on SSS ships in relation to the current values:

Table 3. **Matrix of quality development of propulsion systems on SSS ships** 

г0/7	0/10	0/8	0/8	0/8	0/10	0/5	0/9	0/10	0/8	0/6	0/7	0/9	0/9	0/97
2/7	2/70	2/8	2/8	2/8	2/10	2/5	2/9	2/10	2/8	2/6	2/7	2/9	2/9	2/9
4/7	4/10	4/8	4/8	4/8	4/10	4/5	4/9	4/10	4/8	4/6	4/7	4/9	4/9	4/9
1/7	1/10	1/8	1/8	1/8	1/10	1/5	1/9	1/10	1/8	1/6	1/7	1/9	1/9	1/9
0/7	0/10	0/8	0/8	0/8	0/10	0/5	0/9	0/10	0/8	0/6	0/7	0/9	0/9	0/9
5/7	5/10	5/8	5/8	5/8	5/10	5/5	5/9	5/10	5/8	5/6	5/7	5/9	5/9	5/9
1/7	1/10	1/8	1/8	1/8	1/10	1/5	1/9	1/10	1/8	1/6	1/7	1/9	1/9	1/9
2/7	2/10	2/8	2/8	2/8	2/10	2/5	2/9	2/10	2/8	2/6	2/7	2/9	2/9	2/9
5/7	5/10	5/8	5/8	5/8	5/10	5/5	5/9	5/10	5/8	5/6	5/7	5/9	5/9	5/9
2/7	2/10	2/8	2/8	2/8	2/10	2/5	2/9	2/10	2/8	2/6	2/7	2/9	2/9	2/9
1/7	1/10	1/8	1/8	1/8	1/10	1/5	1/9	1/10	1/8	1/6	1/7	1/9	1/9	1/9
1/7	1/10	1/8	1/8	1/8	1/10	1/5	1/9	1/10	1/8	1/6	1/7	1/9	1/9	1/9
4/7	4/10	4/8	4/8	4/8	4/10	4/5	4/9	4/10	4/8	4/6	4/7	4/9	4/9	4/9
4/7	4/10	4/8	4/8	4/8	4/10	4/5	4/9	4/10	4/8	4/6	4/7	4/9	4/9	4/9
L4/7	4/10	4/5	4/5	4/5	4/10	4/5	4/9	4/10	4/8	4/6	4/7	4/9	4/9	4/9

From the upper matrix it can be calculated the growth rates of the development elements of improving quality of propulsion systems on SSS ships, Table 4.

Table 4. Growth rates of elements of quality improvement products of the shipbuilding industry

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
2	28,6	20,0	25,0	25,0	25,0	20,0	40,0	22,2	20,0	25,0	33,3	28,6	22,2	22,2	22,2
3	57,1	40,0	50,0	50,0	50,0	40,0	80,0	44,4	40,0	50,0	66,7	57,1	44,4	44,4	44,4
4	14,3	10,0	12,5	12,5	12,5	10,0	20,0	11,1	10,0	12,5	16,7	14,3	11,1	11,1	11,1
5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
6	71,4	50,0	62,5	62,5	62,5	50,0	100	55,6	50,0	62,5	83,3	71,4	55,6	55,6	55,6
7	14,3	10,0	12,5	12,5	12,5	10,0	20,0	11,1	10,0	12,5	16,7	14,3	11,1	11,1	11,1
8	28,6	20,0	25,0	25,0	25,0	20,0	40,0	22,2	20,0	25,0	33,3	28,6	22,2	22,2	22,2
9	71,4	50,0	62,5	62,5	62,5	50,0	100	55,6	50,0	62,5	83,3	71,4	55,6	55,6	55,6
10	28,6	20,0	25,0	25,0	25,0	20,0	40,0	22,2	20,0	25,0	33,3	28,6	22,2	22,2	22,2
11	14,3	10,0	12,5	12,5	12,5	10,0	20,0	11,1	10,0	12,5	16,7	14,3	11,1	11,1	11,1
12	14,3	10,0	12,5	12,5	12,5	10,0	20,0	11,1	10,0	12,5	16,7	14,3	11,1	11,1	11,1
13	57,1	40,0	50,0	50,0	50,0	40,0	80,0	44,4	40,0	50,0	66,7	57,1	44,4	44,4	44,4
14	57,1	40,0	50,0	50,0	50,0	40,0	80,0	44,4	40,0	50,0	66,7	57,1	44,4	44,4	44,4
15	57,1	40,0	50,0	50,0	50,0	40,0	80,0	44,4	40,0	50,0	66,7	57,1	44,4	44,4	44,4

### Source: Calculation based on data survey questionnaire

A projection of direct growth rates of propulsion system quality elements on SSS ships for the period up until 2050

The conducted research and evaluation of the development potential of the quality of propulsion systems on SSS ships gave direct growth rates of individual development elements of quality have been obtained, Fig 1.

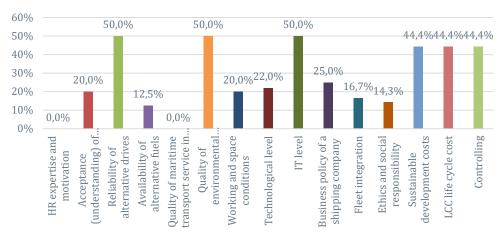


Fig. 1. Direct rates of development of quality elements of propulsion systems on SSS ships

Source: authors' analysis according to the calculation from table 4

Figure 1 clearly presents the results of the research, i.e. the direct growth rates for each element of the development potential of the quality of propulsion systems on SSS ships.

Direct growth rates show that the greatest impact on the entire PRS system should be the reliability of alternative plants, the quality of environmental protection and the IT level (50%). Sustainable development costs, LCC costs and controlling have a significant impact with 44.4%. The limiting factor for the growth and development of the quality of propulsion systems on SSS ships is in human resources in the SSS and the improvement of the quality of service, the growth of which was not predicted by the surveyed experts.

Based on the data from Table 4, indirect growth rates can be predicted between individual elements of the development potential for improving the quality of propulsion systems on SSS ships. In the continuation of this discussion, only the quality of environmental protection due to the release of GHG from SSS ships and the IT level is compared with other elements of development potential. The comparison of other elements is possible according to the same principle, and is omitted due to rationalization.

A projection of indirect growth rates of quality elements of propulsion systems on SSS ships for the period up to 2050

When only direct growth rates are observed, the growth of one element is expressed independently of the growth of others. However, when defining the indirect growth rates, i.e. the growth of the i-th element in relation to the j-th (i, j = 1, ..., n), it is possible to determine the structure of the growth of the elements and to express all relations through the matrix of growth within the system. By expressing the direct and the indirect growth rates at the same time, it is possible to monitor the changes in the growth intensity of individual elements and their structural relationships.

Improving the quality of environmental protection due to the release of GHG from medium-sized ships is a prerequisite for all activities aimed at achieving the full quality of environmentally friendly propulsion systems, i.e. achieving ecological neutrality of medium-sized ships. Therefore, it is important to see how the development element of "environmental"

quality" in the foreseeable future is reflected in other development elements, as is possible by analyzing indirect growth rates.

Comparing the importance of environmental quality with other elements (Figure 2) that affect the development potential of the quality of propulsion systems for the period 2021/2050, the growth rate of working and space conditions was noticeable at 100% in relation to the integration of the fleet (83.3%), expertise and motivation of human resources, as well as ethics and social responsibility (71.4% each). Such high rates of working and space conditions indicate the fact that this element of development potential is strongly influenced by the transformations of propulsion systems. Namely, the results suggest that the transition to environmentally neutral propulsion systems will require SSS ship owners to change working and space conditions, expertise and motivation of human resources, changes in ship owners' business policy and changes in attitudes towards ethics and social responsibility.

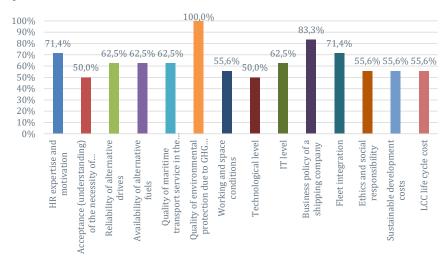


Fig. 2. Indirect growth rates of environmental quality improvement due to GHG discharges from medium-sized ships compared to other development elements Source: authors' analysis according to the calculation from table 4

Improving the quality of propulsion systems will affect both the increase in maintenance costs and the cost of LCC, but also the importance of controlling in order to sharpen the focus of management on the key factors by which they are monitored. This further leads to the continuous improvement of the technological and IT level, maintaining the reliability of the system and the motivation of human resources.

Other important data arising from the projection of the potential for improving the quality of propulsion systems is obtained when comparing the indirect growth rates of other elements with the element of growth of life cycle costs of ships in the fleet of SSS.

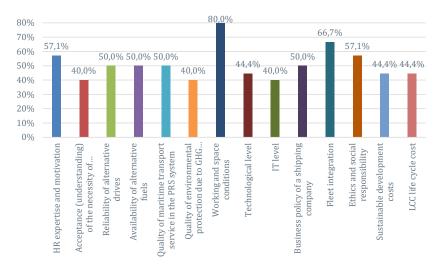


Fig. 3. Indirect growth rates comparing the appearance LCC level with other elements

Source: authors' analysis according to the calculation from table 4

When comparing the indirect growth rates of other elements with the growth of LCC costs (Figure 3), it is clear that the highest growth rates in relation to the impact of LCC costs will be achieved in labor and space elements (80%), followed by fleet integration (7%), expertise and motivation of human resources and ethics social responsibility with 57.1% each, which means that the growth rates of the importance of these elements contribute most to the growth rates of LCC costs as an element of development potential of ship propulsion systems in SSS.

### **CONCLUSION**

By researching and assessing the development potential of the quality of propulsion systems of SSS ships, direct growth rates of the observed development elements were obtained. Direct growth rates show that the most significant impact on the quality of the overall propulsion system is related to the availability of alternative fuels, the amount of GHG and the IT level. The experts who assessed the development elements clearly identified the elements on which future activities aimed at improving the quality of propulsion systems must be based. Furthermore, the human resources element has been identified as a limiting factor for the development of quality improvement systems, but no progress is expected in this area in the foreseeable future (30 years).

By showing direct and indirect growth rates simultaneously, it is possible to monitor changes in the growth intensity of elements and their structural relationships.

The research was conducted on a limited sample of experts from the fields of shipping, shipbuilding, mechanical engineering, energy, technology, human resources management, logistics, maritime law, occupational safety and ecology using the growth matrix of selected elements. The calculated growth rates show the interdependence of elements that can accelerate but also limit development processes according to the set goals. By calculating indirect rates, it is possible to determine which element has what effect on the overall development or the way in which it correlates to other elements.

This method of research opens up possibilities for combining a number of factors that may at some point become important for the topic of improving the quality of propulsion systems from the point of view of GHG emissions.

For some future research, the issues of safety of alternative fuels and investments in low-carbon shipping are open.

### REFERENCES

Bukša, J. (2005). The Meaning of the Short Sea Shipping and the Short Sea Shipping Project Joining Modalities. *Journal of Maritime and Transportation Sciences*, 43(1), 131-140.

Bukša, J. (2010). Management of business-technological risks in coastal liner container shipping, University of Rijeka, 155.

Bukša, J., & Bukša, T. (2011). Quality management in coastal liner container shipping from the aspect of cost management. *Seafaring, Scientific Journal of Maritime Research*, *25*(2), 387-403.

DNV GL – Maritime. (2020). Assessment of selected alternative fuels and technologies. Hamburg: DNV GL and the Horizon Graphic. Retrieved from: https://www.dnv.com/maritime/publications/alternative-fuel-assessment-download.html

DNV-GL. (2020). Maritime forecast to 2050. Energy Transition Outlook 2020, DNV, Retrieved from: https://download.dnv.com/eto-2021-download?\_ga=2.47613159.1348788878.1663929986-1921737678.1663929986

EC. (2019). Europski Zeleni plan. European Commission. Retrieved from: https://www.consilium.europa.eu/hr/policies/green-deal/

IMO. (2018). Initial IMO strategy on reduction of ghg emissions from ships. International Maritime Organization. Retrieved from: ttps://www.cdn.imo.org/localresources/en/OurWork/Environment/Documents/Resolution%20MEPC.304%2872%29\_E.pdf

NMA (2017). Breaking new ground in hydrogen ferry project. Bergen: Norwegian Mariteme Authority. Retrieved from https://www.sdir.no/en/news/news-from-the-nma/breaking-new-ground-in-hydrogen-ferry-project/

Pupavac, D., & Zelenika, R. (2007). Mathematical modeling of the development potential of logistics operators. Shipping *Scientific Journal of Maritime Research*, *21*(1), 23-43.

Shi, W., Grimmelius, H. T., & Stapersma, D. (2010). Analysis of ship propulsion system behaviors and the impact on fuel consumption. *International Shipbuilding Progress*, *57*(1), 35-64. doi:DOI: 10.3233/ISP-2010-0062 Sopta, D., Bukša, T., Bukša, J., & Peronja, I. (12 2020). Alternative Fuels and Technologies for Short Sea Shipping. *Journal of Maritime and Transportation Sciences*, *59*(1), 61-84. doi:https://doi.org/18048/2020.59.04.

Stojanović, D. (1990). Economic mathematical methods and models, Growth matrix: supplement. Belgrade: Faculty of Economics.

# THE LEGAL CONSEQUENCES OF THE GOVERNMENT'S POLICY OF ATTRACTING FOREIGN INVESTORS BASED ON THE OMNIBUS LAW

I Made Pria Dharsana
Master of Notary, Warmadewa University
24 Jalan Terompong, Denpasar-Bali, Indonesia, 80235
https://orcid.org/0000-0002-7217-6457
dharsanaimadepria@gmail.com

Indrasari Kresnadjaja Warmadewa University 24 Jalan Terompong, Denpasar-Bali, Indonesia, 80235

dharsanaimadepria@gmail.com

I Gusti Agung Jordika Pramanditya Warmadewa University 24 Jalan Terompong, Denpasar-Bali, Indonesia, 80235 dharsanaimadepria@gmail.com

**Abstract.** Legal issues arose related to the existence of the article that was quite controversial among law enforcers. It refers to the Employment Copyright Law: Omnibus Law, which was adopted within Management Rights over HGB and HP land granted for a period of 90 years. This policy reduces the authority of the Land Bank. However, this law raises the pros and cons of the issue of supremacist violations against foreign investment business entities that violate the Constitutional Court's decision. Then, the HGU or Right to Use HPL land can be given an extension as well as the authority to cancel regional regulations which indirectly violated the constitutional obligations of the State and the Government over agrarian resources in the country by presidential regulations. Besides, there is also a violation of motives in the monopoly speculation of the land bank. To accommodate, manage and carry out transactions for buying and selling state lands, the Land Bank (BT) institution was formed. BT manages the lands claimed by the state as a result of the implementation of the domain agreement, which are designated as assets of the Land Bank in the form of HPL. However, the source of funding can come from third parties, including debts from foreign institutions that causes conflicts of interest violating the elements of the provisions of granting management rights.

**Keywords:** Government Policy, Foreign Investors, Omnibus Law.

### INTRODUCTION

Analysis of the factors that determine economic growth can be concluded that the level and rate of growth of an economy is determined through the theory of growth, the rate of economic growth is mainly determined through population development, investment development and technological progress. About the issue of increasing foreign attractiveness to invest in indonesia, the government is competing with other countries to formulate strategies and provide answers to the question, what is the appropriate pattern to increase economic growth through investment? Can improve the efficiency and effectiveness of investment activities to be implemented. Efforts needed to increase development certainly require investment in such a way, so that throughout the development process there will be no obstacles originating from supply or demand. This relates to the terms balanced and unbalanced development. Which is inversely proportional to the obstacles that come from supply as described above. These terms are used to indicate that development programs and policies are structured in such a way that there is an excess and shortage of economics in various sectors, resulting in distortion and instability in the economy. According to one expert who developed the balanced and unbalanced theory, hirschman, if the economy wants to be maintained so that it continues to advance, in its existence, development policy can serve as a defense against shocks, disproportions and imbalances (sakino, 2007).

A balanced development program is implemented, the amount of investment that must be made far exceeds the level of investment in the period before the development effort was carried out. This theory of development, which is also called balanced and unbalanced, has the aim of emphasizing the capacity of the need for large amounts of investment for the benefit of development programs so that in the long term the rate of economic growth is always greater than the rate of population growth, so that the level of community welfare can be realized.

To achieve public welfare, the government has issued various rules and policies to achieve this. Indonesia itself is well-known among ASEAN countries as the owner of a convoluted regulatory system, policy and bureaucracy, and other things hinder investment such as political turmoil, legal certainty, and infrastructure. This is due to the quality of human resources. Until now it is still inadequate and infrastructure in remote areas that are famous for their tourism is still lacking. This is contained in the index on the coordinating body for foreign investment which states that there is a decline in PMA. The economic growth system in the year of SBY's government stated that the realization of foreign investment reached 16.21 billion in the first period and in the final period in 2014 the realization reached 28.53%, namely there was a jump of around 14%, this is inversely proportional to only an increase of 0.1% which was initially in 2015, 29.27 billion and 2018 the realization reached 29.30. Another factor that is still worsening is that it is said that for every 1 million US dollars that enters Indonesia, this only results in the achievement of job openings of 32 people. With the decline in human resources and investment, it is impossible to increase economic development growth (gumiwang, 2019).

Companies in several trade sectors that make Indonesia an attractive place for foreign investment, such as Europe and the United States, are capital-intensive sectors (automotive, logistics, and pharmaceutical). One of the government's efforts in increasing economic growth

is to form various arrangements that have global competitiveness, which summarizes the bureaucracy and ease of licensing. Regulations in the field of job creation laws and increasing the growth of foreign investment, namely: omnibus law. The chairman of the legislative body (Baleg) of the DPR, Supratman in his presentation at the plenary meeting explained that the work creation bill was discussed in 64 meetings from April 20 to October 3, 2020. The law, which before was ratified, consisted of 15 chapters and 174 articles, which were later ratified in October 3, 2020. One of the things discussed in the articles of the omnibus law is the management right as one of the foundations of a right granted to certain legal subjects by the government in managing the type of concession land owned by the state, based on article 127 paragraph (3) management rights are granted for 90 years. Which then can be granted the right to use the right to cultivate (HGU), the right to use the building (HGB) and the right to use (HP), use rights on land (HPL).

This has pro and contra impacts, one of the contra effects is the deviation of the right to control from the state (HMN) and has a high potential to misuse power or terms in the dictionary (abuse of power). This management right, if seen in history, is a land right that has no term at all in the basic agrarian law and specifically for rights, as well as its extent, outside the provisions of the UUPA (Basic Agrarian Law). Indirectly, Article 2 paragraph 4 states that the implementation of the state's right of control above can be delegated to autonomous regions and customary law communities, only as necessary and not contradicting the national interest, according to the provisions of government regulations.

For the delegation of authority to exercise the right to control the state it is referred to by existing regulations as management, while for the delegation of the exercise of authority to exercise the right to control the state to indigenous peoples no regulation regulates it so that it is still a *das sollen*, even though the law is flexible enough to accommodate a provision in the future. Management rights for rural areas listed in a particular legal community. This is closely related to the level III area of autonomy that is being planned by the government. Perhaps in the future, to make it easier to understand, let's call it a village management right, in addition to a general management right. In Article 3 of the UUPA, certain rights are given to customary rights which are recognized by the UUPA as an institution which even though it existed before the UUPA, the right to life and its role are given a place in the national agrarian law system.

Article 2 of the UUPA further explains that Article 33 paragraph 3 of the 1945 Constitution reads: "Earth, water and natural resources contained therein are controlled by the state and used for the maximum benefit of the people's prosperity." Meanwhile, Article 2 paragraph 1 of the UUPA states that: based on the provisions in Article 33 paragraph 3 of the Constitution and the matters referred to in Article 1, the earth, water and space, including the natural resources contained therein, are at the natural level. contained in it is at the highest level controlled by the state, as an organization of power for all the people.

As noted in UUD 45 it is stated that the earth, water and natural resources are contained therein, while in Article 2 paragraph 1 it is stated that the earth, water, space and natural resources contained therein are controlled by the state. This broad understanding, as a clear attitude that the three understandings are integration and should also be arranged and resolved in an integrated manner.

Based on the explanation above, the writer formulates two problem formulations, including how is the right of management applied in Indonesia? And what are the solutions and policies for the application of management rights for 90 days which are contrary to the constitutional rights of local governments in managing foreign investment that enters Indonesia?

### **MATERIALS AND METHODS**

The research method used in this paper is normative. Meanwhile, according to an expert in the field of research methods, legal research methods are systematic and certain thoughts that have elements to analyze all the symptoms and problems being studied. As for this research method, it is more specific to discuss the dilemmas that occur in legal arrangements and principles, legal history and legal comparisons (marzuki, 2011).

### **RESULTS AND DISCUSSION**

The Breadth of The Meaning of The Right To Control The State And Its Regulation In National Agrarian Law

How the extent of the state's right to control is stated in article 2 paragraph UUPA, while the state's right to control as referred to in this article gives the authority to:

- a. Regulate and administer the designation, use, supply and maintenance of the earth, water and space.
  - b. Determine and regulate legal relations between people and the earth, water and space.
- c. Determine and regulate legal relations between people and legal actions concerning earth, water and space.

The various kinds of rights contained in the law, precisely in Article 4, have provided a detailed explanation of the rights to the earth's surface, which are referred to as the right to control by individuals or collectively, thus the government in carrying out this law will try to create several legal institutions. to comply with the provisions of this article. From the above description it is clear that the authority of HMN is the authority of the central government and this is proven as stated in Article 2 paragraph 4 which states that the implementation of HMN can be authorized to autonomous regions and customary law communities.

### History and Concept of Management Rights

This HPL has properties and characteristics that are not easy to understand, it can even lead to misinterpretation when juxtaposed with land rights regulated in Article 16 of the UUPA (ownership rights, cultivation rights, building rights and use rights) (Maria, 2008) ). Management rights from the beginning were a translation of the Dutch language Beheersrecht, so at that time it was translated with tenure rights and for a long time this term survived and was used which we will know from the descriptions below:

If it is read to PP 8/53, the original term was control rights which contained:

- a. Plan, designate, use the land.
- b. Use the land to carry out their duties.
- c. Receiving income/compensation and/or annual mandatory money.

The government's determination at that time was to change all land regulations to obtain

the status quo in the issuance of new eigendom rights (before the enactment of our UUPA, because it was still controlled by the b.w. regime) but apparently due to urban development, the city government needed land for land use. the implementation of their duties, as well as many deviations from the land purchased by the people for the government, including the occurrence of lands belonging to the right of control from the regional government that are sometimes sold/exchanged without the government issuing government regulation no. 8 of 1953.

Land designation and use can be interpreted as use planning or in the city it is called zoning planning, and designation is a special bestemming of a use planning. In the agrarian minister's decree no. Sk vi/5/ka dated January 20, 1962, which mentions:

- 1. The right of control (beheer) by a department, agency or autonomous region over land controlled directly by the state, based on government regulation no. 8 of 1953 (l.n. of 1953 no. 14) or other laws and regulations that are enacted by government regulations regarding this matter.
- 2. Right of use with a period of more than 5 years with the understanding that if the time is not specified, it is considered as more than 5 years...

Meanwhile, regarding eigendom rights through a circular letter from the Minister of Agrarian Affairs cq Head of the Planning and Legislation Bureau, which was addressed to the Head of West Java Agrarian Inspection dated March 1, 1962 number ka.3/1/1 it was stated that:

- 1. If the eigendom right is affected by the law on the abolition of particular lands, the land in question will be granted by a decree of the minister of agrarian affairs with the right of control (beheer) to the municipality which previously had the eigendom right.
- 2. In the case of eigendom lands which are only in the form of small parts which are imposed in the law on the abolition of particular lands, then as it is known based on the conversion provisions of the basic agrarian law, the egendom rights have been converted into building use rights. Since such lands have generally been encumbered with erpacht or postal rights, they should be converted into tenure rights, the confirmation of which is carried out by a decree of the agrarian minister as a conversion of the basic agrarian law article 1 paragraph 5.

Furthermore, regarding lands controlled by regions that do not yet have any rights, derived from the liberation of people's rights, the lands will also be given to the region concerned with the right of control. The right of control itself is given to the municipality/regency with the following provisions:

- 1. Municipalities/districts are given the authority to determine the allocation and conduct verification.
- 2. The granting of property rights, building use rights and other rights is still carried out by agrarian agencies according to sk 112/ka/61.
  - 3. Compensation for other payments is still received by the municipality/regency.

Similarly, we can read about the decision of the minister of agriculture and agrarian no. Decree 12/ka/1973 regarding the conversion of opstal and erfpacht rights on municipal eigendom lands, then in deciding to stipulate, first confirming that postal and erfpacht rights on municipal eigendom lands, on the basis of the provisions of article v (the provisions of Article v) the conversion of the basic agrarian law, according to the law it was converted into

building use rights, since September 24, 1961.

The concept of management rights was introduced in Government Regulation (PP) no. 9/1953 concerning the control of state lands (Parlindungan, 1989), according to its title, PP no 8/1953 regulates the control of state land that:

- a. Control over state land can be handed over to the ministry in the egari (Ministry of Internal Affairs), except when the state land has been handed over to the ministry/office or autonomous region. (articles 2 and 3).
- b. Land control over state land can be given and handed over to the ministry/service or autonomous region. To organize the public interest in the area itself. (article 4)
- c. If the land in point b is no longer used, the ownership is handed back. To the Minister of Home Affairs (Article 5).
- d. Ownership of land granted to a ministry/service or autonomous region can be revoked if the first handover has not been or is not by the relationship of the intended purpose. The two areas of land that were handed over exceeded their needs, and the three lands were not maintained or not used properly. (article 8).
- e. State land whose control is handed over to a ministry/office can be handed over through a ministry permit to another party with a short time that must be determined.
- f. The head of an autonomous region may be granted control over state land to be given to other parties a right by the regulations of the Minister of Trade of the Republic of Indonesia.

Characteristics Of Management Rights In Participation In Economic Growth Policies Through Investment.

Reviewing the provisions in the UUPA, it can be seen that HPL. It is not a land right, because it is not stated in Article 16 paragraph (1) of the UUPA which regulates the types of land rights (Winahyu and Fakhrizya. 2019), nor is it an entity of its right of control, because in the general explanation III, the UUPA only mentions 3 (three) land tenure rights, namely HMn, land rights, and ulayat rights. The legal basis for management is stated in the UUPA, whose existence is an interpretation of the provisions of Article 2 paragraph (4) of the UUPA, which states that: "The right to control The implementation of the above mentioned state can be delegated to autonomous regions and does not conflict with national interests, according to the provisions of government regulations. In 1972, HPL was regulated concretely, namely in Article 12 of the Minister of Home Affairs Regulation No. 6 of 1972 concerning the delegation of authority to grant land rights mandated by the Ministry through the issuance of decisions on applications, renewals and the release of cancellation transfer permits in Perkaban No. 1 of 2011 and its amendments (Perkaban No. 3 of 2012) which HPL is given by the National Land Agency or abbreviated as HPL.

The granting of land rights with management rights or HPL is approved by the government, if on the land given HPL there are still other land rights. Before giving HPL to certain legal subjects, it must be noted that the land to be given HPL must be in a clear and clean condition. As explained that the implementation of the HPL is of course carried out by the competent government officials where the area lives, as in some areas the GSBK is, a stadium that was started to be built in the middle. For the first time this GBSK was completed in 1962 which was intended for the Asian Games IV in Jakarta and was managed by authorized officials by applicable laws and regulations.

As for the authority of the management right holder, substantially from the various laws and regulations governing HPL, the authority granted to HPL holders includes, among others:

- a. Planning the allocation and use of the land in question;
- b. Use the land for to carry out its business;
- c. Handing over parts of the land to a third party according to the requirements determined by the company holding the right, which includes aspects of designation, use of time and financial system. And given the authority by the official by applicable regulations and not contradictory.

The detailed authority in granting management rights over state land is then limited, namely:

- a. Land with a maximum area of 1000m<sup>2</sup> (one thousand square meters);
- b. Only Indonesian citizens and legal entities formed under Indonesian law and domiciled in Indonesia;
- c. Granting rights for the first time only. Provided that the change, extension and replacement of the right will be carried out by the agrarian agency concerned, in principle it does not reduce the income previously received by the right holder (article 6 paragraph (2)).

Along with the dynamics of regulation in the field of hpl, there is a shift in the nature of hpl that tends to return to the public, therefore after a long time there are various confusions of understanding about hpl, and various implications, the correction of the position of hpl began in 1996. What can be seen in pp no. 40 of 1996 which states that the right to cultivate, the right to use the building and the right to use the land, in article 1 point 2 hpl are the control rights of the state authorized to exercise part of the state's abundance authority to the holder. In the concept of land itself, the assignment of land rights can be carried out on it with HGB and HP. The three provisions are regulated in:

- a. For building use rights, it can be found in article 21, 22 paragraph (2), article 26 paragraph (2), article 30 letter d, article 34 paragraph (7), article 36 letter d, article 34 paragraph (7), article 35 paragraph (1) letter b, article 36 paragraph (2) and article 38.
- b. Right of use, for the provisions on the use of the right to use and all aspects regulated are contained in article 41, 42 paragraph (2), article 46 paragraph (2), article 50 letter d, article 54 paragraph (9), article 55 paragraph (1) letter b, chapter 58.

In essence, HGB and HP occur on HPL, HGB and HP land which are given a decision through rights approval by the minister and by an appointed official at the proposal of the HPL holder. The later officials who can be given the authority to manage HPL, namely:

- a. Government agencies including local governments;
- b. State-owned enterprises;
- c. Regional owned enterprises;
- d. PT. company;
- e. Authority body:
- f. Other government legal entities are appointed by the government.

Relationship Between HPL Holders And Third Parties

The legal relationship that forms the basis for granting land rights by HPL holders to third

parties is stated in the land use agreement (SPPT). In practice, the SPPT can be referred to by another name, namely a letter of agreement for the transfer, use and management of land rights. Agreements are made in the context of implementing development agreements, ownership and management, handover of land, buildings and supporting facilities, also known as bots or build, operate and transfer. Regarding the bot agreement, it can be interpreted as an agreement between two parties, where the first party surrenders the use of its land to build a building on it by the second party, and the second party has the right to operate and manage the building for a certain time. The things that make up the content/ substance of the agreement are broadly the same as the agreement. Broadly speaking, the meaning is the same as the content of the BOT agreement.

If then the party is unable to keep the agreement, breach of contract or default. Then the HPL holder submits the use of the land as well as the management and implementation of any and all obligations contained in the agreement. While the legal consequences in the form of the application of sanctions in the form of:

- a. Written warning to correct or recover the event of default within a certain time (recovery time);
- b. If point a cannot be implemented, a deliberation will be held at a certain time (deliberation time);
- c. If point b is not achieved, the party who breaches the contract is obliged to pay compensation within a certain time.

For the expiration of the HPL agreement, it ends due to the expiration of the term and is terminated by the decision of the parties in the BOT agreement.

### State Land Assets

Law no. 1/2004 states that state property is all goods purchased or obtained at the expense of the state budget originating from other legitimate acquisitions. Regarding state assets in the form of land, it is regulated in the circular letter of the minister ATR/BPN no. 500-468 dated January 12, 1996 regarding the issue of Ruslag on government lands. In the provisions of the circular, it is stated that (Harsono, 1997):

- a. Lands that are not lands of other parties and which have been physically controlled by the state;
- b. These lands are managed and maintained/maintained through the government's budget;
  - c. The land has been registered in the inventory list of the relevant government agency;
- d. Physical land is controlled or utilized by other parties based on legal relationships made, among others, by the parties and government agencies.

Through other provisions governing the management of state/regional property, the granting of HP and HGB over HPL to third parties can still be carried out according to the procedures stipulated in the laws and regulations in the land sector. It can be seen that the framework of the mindset of HP/HGB over HPL is based on the basis of cooperation in the use and use of it through the principle of efficiency in the management of state property, with standards for the use of needs that are directed at optimally carrying out main tasks and government functions.

### Foreign Investment in Indonesia

The theory of development regarding foreign capital takes the position that foreign capital provides many benefits to countries receiving capital, which are almost entirely developing countries. The arrival of foreign capital into a country makes that country allocate its limited funds for other purposes. Foreign capital will open up new jobs. Thus the problem of unemployment can be resolved and workers will get wages as expected.

The beneficial aspects of foreign capital bring the argument that foreign capital from the point of view of international law must be protected. Protection will facilitate the flow of foreign capital to a country which encourages economic development, especially for free market developing countries from America and Europe to ensure the flow of foreign capital coming to these countries (Guguk, 2011). To ensure that capital inflows through developing and developed foreign countries urge GATT/WTO which contains TRIPs, TRIM's dan GATs. The attitude of world bodies such as the world bank and the IMF encourages economic liberalization, which means that it is left to market forces managed by third parties, namely the private sector, for a climate of privatization.

The theory of development can advance developing countries with evidence that says otherwise, developing countries continue to depend on developed countries, so developing countries rely on foreign exchange from their exports to developed countries, making developing countries dependent on developed country markets. To promote economic growth so that it does not depend solely on developed countries, the government devises a strategy to attract foreign capital, developing countries need political stability.

One of them in the middle of the end of yesterday, the government passed the regulation on job creation which aims to attract foreign investors to invest their capital in Indonesia. To increase competitiveness and encourage investment in Indonesia.1 the problem is whether the number of regulations is a problem or there are other things, such as disharmony regulations that are actually a problem. If many regulations are a problem, then simplifying regulations through the omnibus law concept is certainly the right step. This is because the omnibus law is a law that focuses on simplifying the number of regulations because it revises and revokes many laws at once. Which aims to promote economic growth in increasing local and international competitiveness. The things that are feared then include the rights that are taken away through material facts in the field through the aspect of examples of workers who do not allow the right to strike, both goods must be sold cheaply and reduce production costs. This is then what the public in general is afraid of.

Another thing is allegedly regarding management rights as the root basis of the monopoly liberalization system in the interest of land rights control which is feared to occur in the government system later after all elements of the omnibuslaw mechanism legal system are running and its derivative regulations, especially on the land tenure system in national agrarian law.

### **CONCLUSIONS**

The management of the sale and purchase of state land is established through the Land Bank Institution or abbreviated as BT, but please note that the land claimed by the state or domain verklaring above, is then designated as a land bank asset in the form of HPL. This gives rise to a monopoly in inequality of control over land bank land assets plus a fairly long period of time, which can be up to 90 years and can be extended. This policy creates supremacist rights and government institutions can be easily controlled by the role of investors in creating policies that are more pro to foreign investors. Of course this will rob people of their constitutional rights in business competition, plus inequality in society is still ongoing and very difficult to solve.

### REFERENCES

Guguk, E.R. (2011). Butir-butir Hukum Ekonomi. Jakarta, UI Press.

Gumiwang, R. (2019). Mengapa Investasi Asing tak menambah Kerja Indonesia?. Available on https://tirto. id/mengapa-investasi-asing-tak-menambah-lapangan-kerja-indonesia-eerq, accessed on December 30, 2020. Harsono, B. (1997). Hukum Agraria Indonesia: Sejarah Pembentukan UUPA dan pelaksanaannya. Jakarta, Djambatan.

Marzuki, p.m. (2011). Penelitian hukum, jakara, kencana pranada media group.

Maria. (2008). Tanah dalam Perspektif Hak Ekonomi, Sosial dan Budaya. Jakarta, Buku Kompas.

Parlindungan, A.P. (1989). Hak Pengelolaan menurut Sistem UUPA. Bandung, Mandar Maju.

Sukirno, S. (2007). Ekonomi Pembangunan : Proses, Masalah dan Dasar Kebijakan. Jakarta, PT Kencana Prenada Media Group.

Winahyu and Fakhrizya. (2019)/ Hukum Agraria: Dasar-dasar dan Penerapanya di bidang Agraria. Jakarta, FH UII Press.

### **Laws and Regulation**

Basic Agrarian Law No. 5 Year 1960

Government Regulation No. 40 of 1996 concerning Cultivation Rights, Building Use Rights and Land Rights. Government regulation no. 8 of 1953 concerning the department of land tenure management.

## QUALITY OF EDUCATION IN CROATIA AND PERSPECTIVES OF QUALITY MANAGEMENT OF EDUCATION — APPLICATIONS OF RESEARCH ON TOURISM DEVELOPMENT

### Linda Juraković

PhD, Assistant Professor, Juraj Dobrila University of Pula 30 Zagrebačka Str., Pula, Croatia, 52100 https://orcid.org/0000-0002-2027-8814 linda.jurakovic@gmail.com

### Tea Golja

PhD, Associate Professor,
Juraj Dobrila University of Pula
30 Zagrebačka Str., Pula, Croatia, 52100
https://orcid.org/0000-0003-3665-8181
tea.golja@unipu.hr

### Matteo Legović

Juraj Dobrila University of Pula 30 Zagrebačka Str., Pula, Croatia, 52100 matteo.legovic@student.unipu.hr

**Abstract.** In recent years education has been in the process of reorganization, especially when education has faced major challenges due to the coronavirus pandemic. Today, emphasizing the importance of human potential, the management of educational institutions and the quality of the entire education system face certain challenges. Based on many years of research, the authors note that management has not achieved a necessary level of cognition being a vital component of efficient management. In Croatia, there is a large deficit of students enrolled in high school tourism courses. On the other hand, Croatia, as one of the most developed tourist destination on the Mediterranean, is in a state of high demand for quality and educated tourism workers. With regard to this issue, in this paper, the authors proposed a project for research of competences of school principals for the function of managing educational institutions.

**Keywords:** education, management in education, educational institutions, tourism.

### **INTRODUCTION**

Schools, as bearers of a social progress, have been undergiong the reconstruction, integration and changes for many years, especially in the last two years of the pandemic and post-pandemic period. The necessity of educational management research stems from the deep changes that Croatian society, in particular, educational institutions is undergoing.

This is the result of changes not only in the globalizing environment, but also in domestic economy, culture, demography, and society. These conditions demand a continuous reflection on the role of education in the creation of a ground-breaking and progressive society and economy, which woulf be adaptable to unpredictable challenges in the future. In contemporary societies, intellectual capital has an advantage over natural assets and financial capital regarding the development of the country. Today, investments in knowledge are significantly increasing, the importance of which is prioritized in strategic development projects and is directly applied to boosting the quality of school management. This imposes the concept of lifelong learning as the basis of education, which encourages the individual (director) to learn, improve through theoretical and practical experiences and knowledge in the domain of management.

This paper studies the quality of education in Croatia and perspectives of the quality management of education. The paper analyzes theoretically the quality of education and management in education. Based on many years of researches, the authors will present a project proposal for researching the competence of school principals, emphasizing education in tourism, as one of the important issues in Croatia.

### THEORETICAL FRAMEWORK: QUALITY OF EDUCATION AND ROLE OF MANAGEMENT IN EDUCATION

Mašunović states (2001) that the school system of a country consists of the institutions that are responsible for the population's education and establish the educational process with the help of the scope of certain activities by functioning partially or generally. The functioning of educational institutions is managed by basic laws and regulations. Meanwhile, the School System is established to regulate the relationships between schools and other school institutions. As Juraković, Tatković i Juričić (2011) stated, according to the National Classification, schools do not pertain to economic sphere. The common trait of non-economic institutions is that they are set up to satisfy social concerns and demands and are not profitable (with the exception of private schools). Owing to this fact, the proceeds from the activities of non-profit institutions are used exclusively for the improvement of the entity. School systems that act as pillars for the benefit of the society are occasionally seen as ineffective, perplexing and uncontroled. Doubts are raised about the responsibility of the teaching staff, regarding the common ineffectiveness that exists among the youth at the end of their education, when acquired knowledge have to be applied directly in the production process.

The up-to-date approach to school management requires such administration that could run the school environment in such a way as to enable professional, young staff (students) to find employment easier and their place in the economy after completing their education. Such a contemporary approach to school administration focuses on the «new», and sees the foundations of change in a careful analysis of the traditional and modern working methods. It is time the ineffective methods were rejected in education. The modern school managerial approach respects the personality of teachers and students, emphasizes the teamwork between teachers and students. It also involves the constructivist approach to upbringing and education that pedagogic activity strives for, while it has gained a foothold in the economy

regarding the realization of profit. Specifically, in education, the biggest profit is made by the students (excluding private schools) when they apply the acquired competences in order to get involved in their work as quickly and qualitatively as possible after completing their education. In accordance with the new Education, Science and Technology Strategy (2014), the training of personnel for the management of primary, secondary and higher education institutions, as well as other models of lifelong education, is foreseen.

Juraokvić, Ilak Peršurić and Tomčić (2008) conducted a research on the management of primary and secondary schools. The study was carried out in eight schools, two secondary and six primary schools. The hypothesis that management differ in primary and secondary schools was proved. Thus, in secondary schools, management is a part of the curriculum, while in primary schools there is no such subject. The job profile of school administrator was not linked to management and did not include management as a subject in school curriculum. According to rhe results of the study, only 25 percent of education staff and school managers knew the purpose, goals, and meaning of educational management. All school managers responded that management is essential and helpful for students and the youth in the society. Moreover, the vast majority of school managers (87, 5 percent) were satisfied with their functions. The same number of school managers replied that there is a need of the school management team. Furthermore, all school managers are of the same opinion that such a team should possess a wide range of knowledge and skills linked to educational management. The most important ones involve financial, promotional, psychological, legal and general culture competences.

Research on education as an aspect of tourism development in Croatia was conducted by Bartoluci, Hendija and Petračić (2014). They confirmed that to boost the quality and competitiveness of tourism in Croatia, it is essential to significantly enhance the rate of skilled professionals in tourism. In order to realize this proposal, Bartoluci, Hendija and Petračić (2014) suggest the following steps:

- «modify the image of tourism, raise the prestige of working in tourism by emphasizing the continuous growth of demand for such well-trained professionals, highlight the benefits of jobs in the tourism sphere for women, the youth, and people with with a low education level, and draw attention to the possibility to gain extra income during the peak tourist season,
  - advance education at all levels (from secondary schools to higher education institutions),
- create conditions for opportunities for learning throughout life and constant professional development and progress for the personnel,
  - promote the acquisition of international certification by the personnel,
- study the changes in the demand on the market (what kind of services tourists would like to receive), and persistently adapt the offer to these changes (follow the market trends) since it is insufficient to satisfy the ongiong needs for employees, but it is necessary to take into account the future».

## PROJECT PROPOSAL: RESEARCH OF THE QUALITY AND COMPETENCE OF PRINCIPALS FOR THE FUNCTION OF MANAGING EDUCATIONAL INSTITUTIONS

We are aware of the fact that each small environment is a subject and requires special

treatment due to its specific cultural identity. Such specificities apply to the types of schools and their management. Although school contents, i.e. plans and programs (curricula) can be the same for all schools in the Republic of Croatia in terms of their content, the strategic part of their implementation should be adapted in certain segments to the area where the school is located. Thus, management serves as the holder of the general and specific interest of the entire community. It is the market that demands and creates new jobs, and in parallel with that, schools should follow market trends. As these are professional occupations and service activities, the combination of theory and practice is inevitable. The effectiveness of school management should enable future young professionals to leave the classrooms and enter the working environment, for which they were trained, fitting in with as little preparation as possible. The school management – organizing the educational process with all organize responsibilities.

Internal management – organizing the educational process with all ongoing responsibilities (human resources – teaching staff, teaching aids, work program, etc.).

Outward management – connecting the school (students and teachers) with contents and organizations in the economy.

A qualified management team, when we talk about a school as a pro-social community, can include such professionals as a pedagogue, a social pedagogue, a psychologist, a teacher, a professional manager and other professional associates who directly or indirectly participate in shaping the educational process. However, the school manager as a special staff member (who occupies a specified position) does not exist in the school system, although this role can be taken by any expert in the field of education who will receive the manager's qualification through subsequent training and specialization. The management of an educational institution (school), accepting all the specifics of the environment where it is located, should fulfill the range of tasks as follows:

- 1. determine long-term and short-term school development plans,
- 2. make preparations for the development of plans and appoint personnel,
- 3. coordinate development actions,
- 4. provide all available information systems,
- 5. modernize the school curriculum.
- 6. enhance the flow of information at all levels of management,
- 7. arrange and carry out the marketing study with a view to determine the priorities of the target market areas,
  - 8. define (based on the study) the marketing goals and marketing strategies for the school,
  - 9. define the final work program of the school,
- 10. engage the personnel who will be responsible for the public relations (so-called spokespeople),
  - 11. manage tasks related to determining the price of certain programs (a financial sector),
- 12. organize group and individual meetings where school problems or individual student's problems will be solved,
- 13. act in the direction of constant monitoring of the (internal) competitiveness of the teaching staff, examine their needs, shortcomings, achievements, etc.,
  - 14. connect and maintain relationships with sponsors and donors,
  - 15. establish connections with schools and experts at the international level,

- 16. adapt the actions of students and teachers to current issues of the environment in which the school is located, tensions and trends,
- 17. adapt the default theories of educational content to the service and social sectors of the locality,
- 18. build stable interpersonal relationships within the educational institution (human resources),
- 19. encourage students, teachers and other school employees to iniciate new ideas and projects (manager/team),
  - 20. continuously study the needs and wishes of all members of the educational institution,
- 21. strive to develop a competitive advantage over other schools regarding the quality and results, because competitiveness on the market is one of the most important strategies and goals of today's educational work,
- 22. encourage the incorporation of cultural content of the community into the sphere of school events.

If the school management fulfills all these tasks and brings its educational institution to the rank of an influential institution in terms of organization and results of its work, it gains «market power». In the conditions of the globalized world, schools should specially regard education as a means to refurbish the national cultural heritage and raise the population's awareness of the necessity to nurture national identity by introducing a bigger ammount of national culture content in the school and higher education curricula. The cultivation of new teachers' and students' competences in order to increse the comprehension, familiarity with and transmission of the educational content cannot be achieved solely by work in the lecture hall/classroom, but through the application of various techniques and methods of extracurricular activities (for example, excursions, trips, sightseeing, etc). Moreover, such an approach upholds the elaboration of new curricula, which would include the training of management personnel as a fundamental aim, especially in the field of operational management. Directors should be trained to perform specific jobs and tasks applying an interdisciplinary approach with special emphasis on the social and financial aspects of business. The special goals of the program for training of directors should be focused on lectures, seminars, and practical work with the following goals:

- get acquainted with operating processes in organizing and managing the school,
- get acquainted with the management of human, material and financial resources,
- receive training for the application of information and communication technology.

Upon completion of education, principals should be trained to create and implement the following activities: the creation of development strategies, the creation of financial administration systems, the administration of projects and the school property, obtaining knowledge about digital marketing, advisory services, cooperation with the local community (economy) and Ph.D. For the sake of better insight into the state of Croatian school management, some European experiences in school management (Slovenia, Italy, Austria, Hungary) will be analyzed and compared.

According to the content of the project, the goal and tasks of the research are set. The main goal of the research is to analizy the qualities and competencies of principals for the function of managing primary and secondary schools on a sample of all primary and

secondary schools in the Republic of Croatia, covering all counties. Apart from that, the comparative method allowed to analyze the existing school management systems in several other countries and to single out examples that can be implemented in Croatia.

Research tasks are as follows:

- 1. find out the number of representatives of school management (management-educated staff) in primary and secondary schools,
  - 2. assess the principal's knowledge of the subject of school management,
  - 3. examine the principal's wishes regarding the introduction of management in schools,
  - 4. learn about the principal's previous experience and knowledge of school management,
  - 5. evaluate the current competences of school principals and their views on management,
- 6. analyze what knowledge should be acquired by those who manage the school as a prosocial community,
- 7. estimate to what extent school management is represented in secondary and primary schools,
  - 8. indicate the directions of the applications of the obtained results.

The research would be based on the hypothesis according to which the quality of management in primary and secondary schools in Croatia varies in dependence of the school profile and the principal's professional quialities (education, type of completed studies, experience). In addition, the high-quality development of the school depends mostly on the quality of the school management (principal/team).

For the purposes of this research, a specially structured questionnaire would be constructed, which would analyze the following variables:

- general identification data about the school,
- general identification information about the principal,
- representation of school management in the institution,
- competencies of the current management staff (the principal),
- familiarity of principals with the term and purpose of school management,
- previous education of principals (if any) in the field of management and which forms of lifelong education they resorted to in order to obtain it (e.g. courses, seminars or classic management studies),
  - the needs of principals to acquire basic knowledge in the field of school management,
  - what knowledge principals consider necessary for school management (which areas),
- whether the directors have a need for a management team and which experts such a team should be formed of,
- what the principals think the school manager (team) should do for the development of the school and what his/her current limitations are (e.g. financial, managerial, political, legal, etc.),
- the need to introduce a form of education (professional, university) in the domain of school management/lifelong education.

Other research methods include the observation, the method of comparison, the analysis and synthesis, the statistical method (data processing), and the historical method.

This research would serve the purpose of better understanding the management competencies of current school principals. On the basis of the obtained results, scientific

and professional papers can be written, proposals for strategic development in school management can be given, the quality of the current management would be improved and increased (if there is a need), and the problem (if any) of connecting the school (curriculum) with the needs of the economy would be detected. Apart from that, strategic guidelines for school development (if there is a need) and a better connection with the local community would be specified, guidelines would be given for the introduction of some forms of education in school management in order to enhance better development of modern Croatia.

All information obtained through the survey questionnaire would be processed statistically. The significance of relations between variables would be tested by means of the chi-square test, etc. Econometric calculation models would be used.

### **CONCLUSION**

Management is an essential compotent of the progress and development, with knowledge and behaviour being crucial for success. Educated and highly qualified managers are responsible for organizing the working process in such a way so that all personnel is engaged in certain activities, applying all material resources of the business process. Concerns about the efficiency of management as a subject in a curriculum are likely to emerge owing to the lack of relevant knowledge of this issue and insufficient amount of information provided for educational workers.

Based on many years of research, the authors conclude that management has not achieved the appropriate level of development and realization in education. Thus, being a vital component of effective management, it has not become an indispensable part of educational programs as a school subject. According to all the researches conducted since 2006 until now (Juraković, Ilak Peršurić, Tomčić, 2008; Juraković, Tatković, Juričić, 2011; Juraković, Tatković, 2012; Tatković, Juraković, Zuraković, Juraković, Tatković, Zuraković, Zur

The current models of education in Croatia are particularly insufficient for the education of tourism workers, especially managers in tourism. There is also an extremely large deficit for work and workers in the tourism sector. In addition, the current political situation is not favorable to the development and education of tourism workers who would follow current tourism trends. With view to increase the quality of education, especially in the tourism sector, the authors suggest to conduct research on the competencies of principals for managing educational institutions with the aim of higher quality tourism development in Croatia. As the next phase of the research, Juraković, Golja and Legović will implement the proposed research project.

### **REFERENCES**

Golja, T., (2016). Management in culture and tourism. Pula: Jurja Dobrila University in Pula.

Juraković, L., & Tatković, N. (2012). Contemporary school management— a challenge for primary and secondary schools, Society and Technology. Zagreb: Croatian Communication Association, and International Federation of Communication Association, 380-386.

Juraković, L., (2006). Creativity in the educational process. Revija Iskanje, Community of boarding schools, Slovenia.

Juraković, L., Ilak Peršurić, A. S., & Tomčić, Z., (2008). Management of primary and secondary schools. Proceedings of the 4th International Conference An Enterprise Odyssey: Tourism-Governance and Enterpreneurship, Ekonomski fakultet Osijek, Zagreb, p. 417-428.

Juraković, L., Tatković, N., & Juričić, M. (2011). Management of primary and secondary schools. Education-Technology-Computer Science, 2,(1), 175-190.

Juraković, L., Tatković, N., Radulović, P., & Vekić, M. (2020). Preschool teachers' attitudes to the use of information and communication technology in preschool institutions. In Fundamental and applied researches in practice of leading scientific schools, Pula, 66-72.

Mušanović, M. (2001). Pedagogy of professional education. Rijeka,:Graftrade.

Staraj, R., Juraković, L., Nemrava, J., & Vekić, M., (2021), Contemporary education should begin in preschool age – quality education as a basis of development of ducational, cultural and health institutions, Single Educational Space in the Conditions of Digital Transformation, Collective monograph, p. 15-31.

Tatković, N., Juraković, L. (2014). Implementation of Bologna process-Experiences and Challenges, In Education for Development. Juraj Dobrila University of Pula, Department of Educational Sciences, Pula, p. 57-72.

Tatković, N., Juraković, L., Tatković, S. (2016), Prospects of Education for Development in the Context of the Bologna Process Guidelines and the Role of Stress in the Academic Adjustment of University Students, In Perspectives of education for development in the context of active Citizenship. Juraj Dobrila University of Pula, Croatia, Faculty of Educational Sciences, Pula, p. 3-23.

Tatković, N., Juraković, L., Tatković, S. (2019). Developing computer literacy among elementary school children – Education for the future. Asian Life Sciences The Asian International Journal of Life Sciences, Suplement 21(2), p. 371-383.

# TEACHER PROFESSIONAL DEVELOPMENT IN THE CONDITIONS OF EDUCATION TRANSFORMATION: NEW REGULATORY FRAMEWORK, CHALLENGES AND OPPORTUNITIES

### Marian Byrka

Doctor of Education, Professor, Professor of Department of Pedagogy, Psychology and Education Management,
Institute of Postgraduate Pedagogical Education of Chernivtsi region

20, I. Franka Str., Chernivtsi, Ukraine

http://orcid.org/0000-0002-2891-0044

mbyrka@yahoo.com

### Andrii Sushchenko

Doctor of Education, Professor, Chief of the Department of Education and Management of
Educational Institution, Classic Private University
70-b, Zhukovskogo Str., Zaporizhzhia, Ukraine, 69002
https://orcid.org/0000-0003-1659-4280
docanvisu@gmail.com

#### Oleksandra Chubrei

Doctor of Education, Associated Professor, Associated Professor of Department of
Economic Geography and Environmental Management
Yuriy Fedkovych Chernivtsi National University
2, Kotsyubynsky Str., Chernivtsi, Ukraine, 58012
https://orcid.org/0000-0003-4276-1396
o.chubrey@chnu.edu.ua

### Nataliia Yakubovska

PhD in Philology, Associate Professor, Associate Professor of Department of Romance Philology and Translation
Yuriy Fedkovych Chernivtsi National University
2, Kotsyubynsky Str., Chernivtsi, Ukraine, 58012
https://orcid.org/0000-0003-2391-6188
n.yakubovska@chnu.edu.ua

### Hanna Dudchak

Postgraduate Student of the Department of Education and Management of Educational Institution

Classic Private University

70-b, Zhukovskogo Str., Zaporizhzhia, Ukraine, 69002

https://orcid.org/0000-0003-4159-1719

hdudchak@gmail.com

**Abstract.** The article identifies new challenges and potential opportunities for teacher professional development in the context of nowadays Ukrainian education system transformation. The meaning of the research concepts of "transformation", "modernization" and "reformation" were clarified. The "transformation" is interpreted as profound qualitative changes in the main structural components of the system, which are satisfactory to the

challenges of modern society. The conducted literature review determined that the processes and changes in current education system of Ukraine should be defined not as modernization or reformation but as transformation. Nevertheless, the education transformation in Ukraine includes both modernization and reformation. A strong impact on teacher's professional development maintains: 1) the system of general secondary education since it determines goals, terms, and rules of professional activities, and 2) the system of postgraduate pedagogical education that induces every teacher to find the most satisfactory methods, means and approaches to sustain high productivity and achieve complete self-realization in everyday routine. The current Ukrainian system of general secondary education is under changes performed according to the "Concept of the New Ukrainian School" implemented in the new "State Standard of Basic Secondary Education for 5-9 grades" and "Professional Standard "Teacher of general secondary education institution". The existing Ukrainian system of postgraduate pedagogical education is revised in accordance with "Procedure for improving the qualifications of pedagogical and research and teaching staff" and conceptual and methodological principles of the implementation of the certification process outlined in the "Framework for continuous professional development of teachers". The challenges that the new regulatory framework of Ukrainian education generates for teachers in the system of general secondary education and postgraduate pedagogical education are stressed, and new opportunities for teacher professional development are accentuated.

**Keywords:** transformation, regulatory framework, system of general secondary education, system of postgraduate pedagogical education, teacher professional development.

### **INTRODUCTION**

The Ukrainian education system, adapting to the new terms of globalization, integration, and the information society, nowadays is under the effect of various reforms that lead to a qualitative transformation of its target orientations, content, forms, methods, and approaches to education.

From September 2022, following the Concept of the New Ukrainian School (Hrynevych, 2016), 5th-grade students of general secondary education institutions will undergo study based on the new State Standard of Basic Education (Cabinet of Ministers of Ukraine, 2020), which ensures continuity between Ukrainian primary and secondary schools and implements the person-oriented and competency-based as the leading approaches.

Under such circumstances, the problem of teacher professional development becomes very relevant insomuch as teachers are the ones who will practically implement all reforms. In addition, only they can ensure the effectiveness of the transformation of the Ukrainian education system and make Ukrainian school graduates competitive and able to get further education at European education establishments.

The Encyclopedia of Education interprets professional development as a process that

forms a system of personal properties of a subject of professional activity in the conditions of continuous professional education, self-education, and the implementation of professional activities (Kremin, 2008). Along these lines, teacher professional development (TPD) is an uninterrupted educational process implemented in the system of postgraduate pedagogical education (SPPE) but directed and closely connected to the system of general secondary education (SGSE). Therefore, it is necessary to define challenges and outline possibilities that the new regulatory framework in the conditions of the Ukrainian education transformation (both in SGSE and SPPE) generates in the TPD context.

Various aspects of the problem of teacher professional development are under study of researchers worldwide. In studies and publications, scientists pay attention to the problems of: teacher professional development in changing conditions (Beijaard, Meijer, Morine-Dershimer, and Tillema, 2005), overcoming innocence and resistance of professional development for web based teaching (Gallant, 2000), teacher professional development in the context of education for peace (Semenog, 2019), theoretical principles of teacher professional development (Yaremko, 2016). Author's view on the essence of teacher professional development as study phenomena is presented in doctoral dissertation study – the system of professional development of teachers of natural sciences and mathematics in postgraduate education (Byrka, 2016).

Several publications were devoted to the problem of education transformation. Generalization of scientific developments allows to allocate the works devoted to: the phenomenon of "education transformation" in scientific research (Tsyupak, 2017), the role of transformation in learning and education for sustainability (Filho et al., 2018), the peculiarities of professional training of educational managers in conditions of transformation processes (Prykhodkina et al., 2022), the modernization of higher agrarian education in Poland in the conditions of European integration (Sokolovich-Altunina, 2012).

However, the conducted studies generally concentrate on the particular process of teachers' workplace changes, teacher learning of a new technology, as well as the improvement of the quality of teacher thinking and learning, bypassing the exploration of the challenges and opportunities of teacher professional development in the conditions of education transformation as a general and ascending problem for ensuring efficient performance of all planned reforms.

The purpose of the study is to identify challenges and potential opportunities for teacher professional development generated by new regulatory framework in the conditions of Ukrainian education transformation.

### **MATERIALS AND METHODS**

The study implemented a qualitative, inductive research design with all appropriate ethical concerns taken into consideration to comply with the norms and standards of the field. The research methodology employs such theoretical methods, namely: limited literature review for conceptualization on the research issue; the analysis, synthesis, description, and definition to determine and clarify the meaning of the research concepts: "transformation", "modernization" and "reformation"; the analysis, synthesis, abstraction, generalization, induction, deduction, description, definition as well as principles of objectivity and continuity

to identify challenges and potential opportunities for TPD generated by the new regulatory framework in the conditions of Ukrainian education transformation.

The regulatory framework of research consists of the new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020), "Concept of the New Ukrainian School" (Hrynevych, 2016), "Procedure for improving the qualifications of pedagogical and research and teaching staff" (Cabinet of Ministers of Ukraine, 2019), "Professional Standard "Teacher of general secondary education institution" (Ministry of Economic Development, Trade and Agriculture of Ukraine, 2020), and "Framework for continuous professional development of teachers" (Ministry of Education and Science of Ukraine, 2017).

### **RESULTS AND DISCUSSION**

The meaning of the concept "transformation".

To better understand the conceptual foundations of TPD in the conditions of education transformation, we need to clarify the meaning of the basic concept of study – "transformation". In general, the concept "transformation" comes from the Latin word "transformatio", which means change, transformation of form, shape, essential properties of something (Melnichuk, 1974).

Nowadays, the concept "transformation" is widely used both in the natural sciences (mathematics, physics, biology, technology, design, etc.) and in the social sciences and humanities (economics, law, linguistics, public administration, etc.).

However, in the social and humanitarian sciences the concept "transformation" was most actively used in the last 70 years to characterize innovations in culture, politics and economics conditioned internationalization, integration, informatization and globalization. Therefore, in modern research, the concept "transformation" implies various meanings. For example, A. Vasyliuk connects "transformation" with a long-term qualitative process of adaptation to the environment changes with the simultaneous introduction of innovations (Vasyliuk, 2007). I. Tsyupak believes that "transformation" describes a certain state of society in which there are qualitative changes in the forms of social relations and ways of development (Tsyupak, 2017).

Nevertheless, all definitions of the concept "transformation" have in common its interpretation as profound qualitative changes in the main structural components of the system, which are satisfactory to the challenges of modern society. Note, recent studies along with the concept "transformation" often use notions of "modernization" and "reformation" which need to be specified also.

In general, the concept "modernization" (French "modernisation") is defined as renewal, improvement, giving anything a modern look, processing under contemporary requirements (Melnichuk, 1974). The purpose of modernization of any social system is to achieve compliance with current standards, and its result is to increase the efficiency and quality of the conducted process (Sokolovich-Altunina, 2012). Simultaneously, one of the most significant features of modernization, as notes A. Vasyliuk, is that changes do not occur in the entire system, but only in its separate structural components (Vasyliuk, 2007).

Consequently, "modernization" is a progressive change that meets the requirements of the time, as a result of which the system (or separate structural components) increases its efficiency. However, such changes are often not drastic, as they do not involve restructuring the entire system.

The concept "reformation" (Latin "reformo") is a renovation introduced by legislative means (Melnichuk, 1974). Also, reformation is a way of change carried out by the authorities, initiated "from top to bottom" with a clear awareness of its goals (Sokolovich-Altunina, 2012).

The way of "reformation" implementation in education is a "reform" – any change in the education system. Every "reform" should: 1) correspond to educational policy, 2) outline strategic intentions, 3) emerge as a concept of government, regional education authorities with appropriate powers in the field of teaching and education, or influential public organizations, compounds that evolved from a state of ideas and proposals into the state educational policy (Vasyliuk, 2007).

Consequently, "reformation" is a purposeful process of partial, radical, systemic, comprehensive education changes, initiated "from top to bottom" and regulated by legislation under the state educational policy. Relevant ways to reformation implementation are reforms. So, we can conclude that the processes and changes that the contemporary education system of Ukraine is going through should be defined as transformation, not as modernization or reforming. But, the education transformation in Ukraine includes both modernization and reformation.

The new regulatory framework of Ukrainian SGSE and its challenges to TPD

The SGSE generally ensures the formation of a person and lays the foundations for his successful self-realization throughout life in a specific society. Therefore, the main goal of the SGSE is always the same – socialization of an individual as a person. Socialization represents an individual preparation for a successful life and self-realization in a specific society. But we should remember that every society is constantly changing, transforming, and renewing itself, so the requirements for a graduate of an educational institution also change.

The current Ukrainian SGSE is under transformation that occurs following the new vision declared in "The Concept of the New Ukrainian School" (Hrynevych, 2016) and implemented in the new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020).

The aim of the contemporary SGSE for 5-9 grades is the development of abilities, interests, and gifts of students; the formation of competencies necessary for their socialization and civic activity, the conscious choice of a life path and self-realization; the continuation of education at the level of professional education or acquiring a profession; education of a responsible, respectful attitude towards the family, society, natural environment, national and cultural values of the Ukrainian people. Reaching this objective is ensured by students' acquirement of appropriate value orientations, key competencies, and cross-cutting skills necessary for the future citizen to achieve his own goals and successful activities in society.

The realization of a new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020) causes TPD several challenges and opportunities concerning the achievement of value benchmarks that include: respect for the student's personality; ensuring equal access to quality education; compliance with the principles of academic integrity; support of students' independence, entrepreneurship, and initiative; development of critical thinking and self-confidence; formation of a healthy lifestyle culture;

forming students active civic position and patriotism.

One of the main education challenges to TPD in the new State Standard is an apparition among student educational achievements of a new target orientation – attitudes. Such a challenge is very perspective because, over time, knowledge is lost, skills forgotten, but attitudes as a value component remain with the person lifelong. Consequently, the highest goal of the teacher in education becomes to instill a love for the subject of teaching, as well as for work and learning in general, and the lowest is to form at least a positive attitude. In this context, a teacher should obtain knowledge related to axiology, motivation, self-education, and succeed in new situations.

Another challenge to TPD comes from the fact that the new State Standard special attention pays to cross-cutting skills that act as a means for forming and developing students' key competencies.

The list of such cross-cutting skills includes: reading with understanding; expressing own opinion orally or in written form; critically and systematically thinking; logically justifying own position; acting creatively; showing initiative; managing own emotions constructively; assessing risks; making decisions and solving problems. The need to form and develop the mentioned cross-cutting skills in all integrated courses or subjects produces new challenges and opportunities for TPD refers to technologization, which involves considering the educational process as a clearly defined sequence of stages, as well as the teacher's actions at each of these stages.

One more challenge to TPD in Ukrainian SGSE is the creation of professional standards of teacher professional activity in secondary schools that begin with approval of the "Professional Standard "Teacher of general secondary education institution" (Ministry of Economic Development, Trade, and Agriculture of Ukraine, 2020).

The Professional Standard embodies a modern approach to determining the list and description of general and professional competencies of a secondary school teacher. The general competencies include civic, social, cultural, leadership, and entrepreneurial.

The document also contains a description of professional competencies in the distribution of professional functions of a teacher. "Teaching subjects (integrated courses)" professional function requires language-communicative, subject-methodical, and information-digital competencies. Professional function "Partnership interaction with the participants of the educational process" involves psychological, emotional-ethical, and pedagogical partnership competencies of a teacher. Realization of a "Participation in the organization of a safe and healthy educational environment" as a teacher professional function suppose possession of inclusive, health-preserving, and projective competencies. Professional function "Management of the educational process" needs teachers' prognostic, organizational, evaluative, and analytical competencies. "Continuous professional development" as a professional function obligates teachers to have developed innovative, reflective competencies, and lifelong learning abilities.

Despite numerous challenges to TPD, The Professional Standard creates significant opportunities for teachers to determine clear guidelines for professional development goals and prevents risks of biased assessment of teachers' professional competencies during their attestation and certification.

The new regulatory framework of SPPE and its challenges to TPD

The purpose of the SPPE is to ensure rapid and high-quality professional development of teaching staff and management personnel of the general secondary education institutions that act as implementers of educational policy and education reforms.

The new regulatory framework in the **SPPE** scene generates new challenges and opportunities for TPD caused by the formation of a new system of professional development of teachers and management personnel of general secondary educational institutions and creation of a network of institutions for independent certification of teachers.

The first challenge, the formation of a new system of professional development of teachers and management personnel of educational institutions, comes from the "Procedure for improving the qualifications of pedagogical and research and teaching staff" (Cabinet of Ministers of Ukraine, 2019).

According to the approved document, now for teachers is necessary to improve qualifications yearly, and within five years should acquire not less than 150 hours of professional development (30 credits). Herewith, the teacher obtains an opportunity of free choice of forms, methods, means, duration, and place of qualification, as well as full responsibility for their professional development.

Teacher training forms are institutional (full-time (day, evening), part-time, distance, online), dual, and at the workplace, and any formats can combine.

The main types of teacher training are training under the teacher professional development program, participation in seminars, workshops, webinars, master classes, and internships implemented as an individual program developed and approved by the subject of professional development.

The main teacher training goals are:

- development of the main teacher's professional competencies (knowledge of the educational subject, professional methods, technologies);
- development of other teacher professional competencies speaking, communication, inclusive, emotional, and ethical competence;
- mastering the latest education technologies, familiarization with modern equipment, technology, the state and development trends in the teaching subject;
- preparing teachers for the formation of cross-cutting skills and key competencies development of secondary school students;
- teacher familiarization with psychological and physiological characteristics of students of a certain age, as well as andragogy basics;
- preparing teachers for the creation of a safe and inclusive educational environment through providing additional support to children with special educational needs in the educational process;
- to increase teachers' ability to use the information and digital technologies in the educational process, including providing e-learning, information and cyber security, etc.

The document also defines the mandatory requirement for teachers to acquire competencies in e-learning, adult education, and the organization of special education (15 hours).

Another challenge to TPD comes from the teacher's opportunity of free choice of forms,

methods, means, duration, and place of training that determines the implementation of the TPD by an individual trajectory.

The individual trajectory of TPD can be executed as a blend of formal (10%), non-formal (10%), and informal forms (80%) of learning.

The formal learning forms are teacher training courses and internships performed on a syllabus and have a diagnostic part. Therefore, such training outcomes are recognized by the school administration. The non-formal and informal learning forms include seminars, workshops, webinars, master classes, and teachers' self-education without any syllabus and diagnosis. Hence their educational outcomes are not recognized by the school administration.

Since informal learning beset 80% of TPD, this form needs a more detailed examination.

*Informal learning* involves the teacher's self-organized acquisition of new knowledge and skills during every day professional, social, family, or leisure activities. Such educational activity is not documented, preplanned and controlled, but contributes to the expansion of teacher professional competencies and acts like one of the key competencies of a person (Samoilenko, 2019).

The forms of informal education are one-time lectures, video lessons, media consultations, communication with others, reading specialized magazines, watching videos, and spontaneous conversations.

In the SGSE context, informal learning is implemented through teacher self-education activities that cover: scientific research on the methodical problem; study of scientific, methodical, and educational literature; participation in collective and group forms of methodical activity; studying the experience of colleagues; development and practical trying of personal materials. The methods of teacher self-education include autonomous work with literature; communication; self-training; isolated activity with audiovisual means; separated performance of practical tasks; individual visits to the cultural institutions, lectures, excursions; experiments, etc.

Nowadays, the use of ICT for TPD is very promising because it generates new trends like online platforms and online teacher communities.

In Ukraine, various online platforms (Coursera, EdEra, EdX, iTunes U, KhanAcademy, Prometheus, Udemy, etc.) are widespread, as they offer teachers opportunities to study at a time convenient for them and receive a certificate of completion. Such platforms provide online courses on current study topics and contain educational and methodical materials, interactive tests, forums, video lectures by teachers of the world's leading universities, etc.

The online teacher community is a virtual professional association, representing a group of teachers who carry out information exchange, professional communication (in the form of consultations, mutual reviews, etc.), and joint activities, whose contacts are mediated by the services and resources of the global computer network Internet (e-mail, sites, chats, and forums, etc.) (Byrka, 2016).

For the teacher, joining an online teacher community has several advantages, namely: fast communication and professional development to solve their professional problems with the primary source regardless of the geographical location; cooperative creation of products; individual and collective creativity; significant optimization of time and financial costs for the organization of one's activities (there are always professionals in the network

who can provide you with assistance and share already completed tasks); the opportunity to openly express own opinion on various issues. In addition, participation in the online teacher community helps to acquire various professional knowledge and skills, opens up new opportunities for the use of ICT in education; promotes interaction with like-minded colleagues; provides an opportunity to receive help from other teachers; opens access to the library of methodical materials; helps in enrichment with new ideas, promotes inspiration for further research and experiments.

Therefore, every teacher should perform informal learning continuously and systematically. The last challenge to TPD concerns the teachers' appraisal process will be gradually replaced by certification.

The conceptual and methodological principles of the implementation of the certification process are outlined in the "Framework for continuous professional development of teachers" (Ministry of Education and Science of Ukraine, 2017). In particular, this document defines teacher competencies, namely: possession of innovative educational methods and technologies and their active dissemination in the professional environment; implementation of a competency-based approach to the educational process; production of new innovative ideas; mastery of a wide range of learning strategies, technologies of creative pedagogical activity taking into account the characteristics of the educational material and the abilities of students; the use of non-standard forms of lessons and educational classes, etc.

The descriptors of teacher certification for all qualification categories are common and include "Lesson and course planning", "Students' understanding", 'Organization of the lesson", "Evaluation and assessment of educational achievements", "Knowledge of teaching Subject" and "Management of professional development".

Considering that the certification of teachers takes place voluntarily and solely at the teacher initiative, it has some opportunities as getting an additional payment of 20% of the official salary; admission of the certification as teacher appraisal with assigning a qualification category, and/or teaching rank; right to participate in procedures and activities related to quality assurance and the introduction of pedagogical innovations and new technologies in the education system.

Although, the certificate is valid for three years only and listed teacher's competencies quietly differ from the "Professional Standard "Teacher of general secondary education institution".

### **CONCLUSIONS**

Now Ukrainian education should be considered under transformation insomuch occur profound qualitative changes in the main structural components of the system satisfactory to the challenges of modern society. But, this transformation includes modernization and reformation, which are closely related.

The transformation of the Ukrainian education system reflects the emergence of a new regulatory framework of general secondary education and postgraduate pedagogical education that generates new challenges and opportunities for teacher professional development.

Teacher professional development is an uninterrupted educational process implemented

in postgraduate pedagogical education but directed and closely connected to general secondary education.

The new regulatory framework of the transformation of the Ukrainian education system consists of the new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020), "Concept of the New Ukrainian School" (Hrynevych, 2016), "Procedure for improving the qualifications of pedagogical and research and teaching staff" (Cabinet of Ministers of Ukraine, 2019), "Professional Standard "Teacher of general secondary education institution" (Ministry of Economic Development, Trade, and Agriculture of Ukraine, 2020), and "Framework for continuous professional development of teachers" (Ministry of Education and Science of Ukraine, 2017).

The challenges and opportunities for teacher professional development generated by the new regulatory framework of the system of general secondary education are: 1) achievement of value benchmarks of the new State Standard; 2) requirement of the knowledge related to axiology, motivation, self-education, and success in new situations; 3) be prepared to use cross-cutting skills for forming and developing students' key competencies; 4) creation of a professional standard of teacher professional activity in secondary schools that determine clear guidelines for professional development goals and prevents risks of biased assessment of teachers' professional competencies during their attestation and certification.

The new regulatory framework of the system of postgraduate pedagogical education also generates new challenges and opportunities for teacher professional development initiated by the formation of a new system of professional development of teachers and management personnel of general secondary educational institutions and the creation of a network of institutions for independent certification of teachers. Among new challenges and opportunities to teacher professional development in this scene are: 1) the formation of a new system of professional development of teachers and management personnel of educational institutions; 2) the teacher's opportunity of free choice of forms, methods, means, duration, and place of training; 3) the implementation of the teacher professional development by an individual trajectory; 4) informal learning as a key instrument of the teacher professional development; 5) gradually replacing of the teachers' appraisal process by certification.

Further research will focus on effective teacher professional development technology to adequately and satisfactorily respond to defined challenges and opportunities.

### REFERENCES

Beijaard, D., Meijer, P., Morine-Dershimer, G., Tillema, H. (2005). Teacher Professional Development in Changing Conditions. Springer Dordrecht. 364 p. DOI: 10.1007/1-4020-3699-X.

Byrka, M. F. (2016). The system of professional development of teachers of natural sciences and mathematics in postgraduate education. Doctoral Thesis. Zaporizhzhia: Classic Private University. 440 p.

Cabinet of Ministers of Ukraine. (2019). Decree No. 800 "Some issues of professional development of pedagogical and research-pedagogical staff". Retrieved from: https://zakon.rada.gov.ua/laws/show/800-2019-%D0%BF#Text.

Cabinet of Ministers of Ukraine. (2020). Decree No. 898 "About some issues of state standards of complete general secondary education". Retrieved from: http://search.ligazakon.ua/l\_doc2.nsf/link1/KP200898.html. Filho, W. L., Raath, S., Lazzarini, B., Vargas, V. R., Souza, L. De, Anholon, R., Quelhas, O. L. G., Haddad, R., Klavins,

M., Orlovic, V. L. (2018). The role of transformation in learning and education for sustainability. *Journal of Cleaner Production*, 199, 286-295. https://doi.org/10.1016/j.jclepro.2018.07.017.

Gallant, G. M. (2000). Professional development for web based teaching: overcoming innocence and resistance. *New Directions For Adult And Continuing Education*, 88, 69-78. DOI: 10.1002/ace.8807.

Hrynevych, L., Elkin, O., Kalashnikova, S. (2016). New Ukrainian school: conceptual foundations of secondary school reform. Lviv, 40 p.

Kremin, V. G. (2008). Encyclopedia of Education. Kyiv: Yurinkom Inter, 1040 p.

Melnichuk, O. S. (1974). Dictionary of foreign words. Kyiv: URE, 776 p.

Ministry of Economic Development, Trade and Agriculture of Ukraine. (2020). Order №2736-20. "On approval of the professional standard for the professions "Teacher of primary classes of a general secondary education institution", "Teacher of primary education (with a diploma of a junior specialist)". Retrieved from: https://zakon.rada.gov.ua/rada/show/v2736915-20#Text.

Ministry of Education and Science of Ukraine. (2017). Order No1547. "On approval of the Framework for continuous professional development of teachers". Retrieved from: http://ngschoolteacher.wixsite.com/cpdinsett.

Prykhodkina, N., Tymoshko, H., Sholokh, O., Makhynia, T., Koroliuk, S., & Genkal, S. (2022). Peculiarities of Professional Training of Educational Managers in Conditions of Transformation Processes. *Postmodern Openings*, 13(2), 254-272. https://doi.org/10.18662/po/13.2/452.

Samoilenko, O. A. (2019). Informal education in the system of personal and professional development of an adult. *Bulletin*, 1 (157), 188-194. DOI: 10.5281/zenodo.2622637.

Semenog, O. M. (2019). Professional development of a teacher in the context of education for peace. *Education for peace*, 2, 153-166.

Sokolovich-Altunina, Y. O. (2012). Modernization of higher agrarian education in Poland in the conditions of European integration. Sumy: Sumy state ped. univ. A.S. Makarenko, 263 p.

Tsyupak, I. M. (2017). The phenomenon of "education transformation" in scientific research. *Scientific treasury of education of Donetsk region*, 1, 9-13.

Vasyliuk, A. V. (2007). Reforms of school education in Poland: history and modernity. Nizhyn: NDU. M. Gogol, 340 p. Yaremko, G.V. (2016). Theoretical principles of professional development of teachers. *Young scientist*, 12, 554-558.

# JUDICIAL REVIEW: THE DISPUTE SETTLEMENT BY THE COURT INSTITUTION BETWEEN THE FOUNDATION AND ITS MANAGEMENT

Ida Bagus Bayu Brahmantya

Faculty of Law, Udayana University,
Bukit Jimbaran, Kuta Selatan, Badung, Denpasar-Bali, Indonesia, 80361
https://orcid.org/0000-0002-2575-3426
keprabayu.fhud@gmail.com

I Nyoman Suyatna

Faculty of Law, Udayana University, Bukit Jimbaran, Kuta Selatan, Badung, Denpasar-Bali, Indonesia, 80361 https://orcid.org/0000-0003-3719-9335

Dewa Gde Rudy

Faculty of Law, Udayana University,
Bukit Jimbaran, Kuta Selatan, Badung, Denpasar-Bali, Indonesia, 80361
https://orcid.org/0000-0002-1318-1002

**Abstract.** This study aims to analyze disputes between foundations and foundation administrators in internal conflicts including the dismissal, replacement and appointment of foundation administrators and procedures for resolving such disputes between foundations and foundation administrators through the general judiciary and state administration. If a board member is found to have acted detrimental to the foundation, then based on the decision of the supervisor's meeting, the board can be dismissed. This is a trigger for disputes that occur within the foundation. This dispute can be resolved by filing a lawsuit by the management who is dismissed on the basis of unlawful acts committed by the foundation. This research is a normative legal research with qualitative analysis. This study concludes that disputes between foundations and foundation management are caused by the implementation of foundation activities that are not in accordance with applicable laws, and the foundation's articles of association. The settlement of disputes between foundations and foundation administrators through judicial institutions is one alternative dispute resolution that can be used, depending on the type and the object of the dispute before the court.

**Keywords:** foundation, the management, dispute in the court.

### **INTRODUCTION**

A foundation is a non-profit purpose-oriented activity. Foundations can be established by one or more people, where the assets of the founders are separated as the initial assets of the foundation. The foundation established by a will that conveys a message to establish a foundation is considered an obligation aimed at the heirs or beneficiary to carry out the will.

Foundations were originally not specifically regulated, but based on custom and jurisprudence in certain cases foundations were recognized as legal entities. The foundation is one of the recognized legal entities in Indonesia, and its existence has been known by the Indonesian people since the days of the Dutch East Indies. The term Foundation was originally a translation of the terms "stichting" in Dutch and "foundation" in English (Chatamarrasjid, 2000). The rapid development of foundations that are not supported by clear regulations does not rule out the possibility of causing legal problems, which may involve the interests of the foundation managers and other interested parties in the foundation, including this for the government (Murjiyanto, 2011).

With input and pressure from various parties, the foundation, which was originally just a term in the Civil Code (hereinafter referred to as the Criminal Code) or the Burgelijk Wetbook (hereinafter referred to as BW), the government and the House of Representatives adopted the Law no. 16 of 2001 concerning Foundations. It was later amended by the issuance of Law no. 28 of 2004 concerning Foundations which has been in effect until now. The Law no. 28 of 2004 on Amendments to Law Number 16 of 2001 concerning Foundations (hereinafter referred to as Law on Foundations) in Article 1 point 1 explains that a foundation is a legal entity consisting of assets that are separated and intended to achieve goals and objectives in the social, religious and humanitarian fields that do not have members.

In accordance with the principle of the foundation, it has no members, unlike in companies, where the owners of capital in the company are basically members of the company, while in the foundation there are people who manage the foundation, which in the Law on Foundations is called the organ of the foundation consisting of coaches, administrators and supervisors. Based on the Law on Foundations, it is explained that each organ of the foundation is not allowed to hold concurrent positions, i.e. a member of the board of directors may not concurrently serve as a member of the board and/or member of the supervisory board, the board of directors may not concurrently serve as a coach or supervisor, and supervisors may not concurrently serve as coaches and administrators.

The management of the foundation has special powers, duties and obligations based on Article 35 paragraph (1) of the Law on Foundations which explains that the management of the foundation has the right to represent the foundation both inside and outside the court. If the board of the foundation is dismissed at any time by the supervisor based on the decision of the board of directors meeting, the board of the foundation has the right to submit an application to the court for the cancellation of his dismissal no later than 30 days from the date the request for cancellation is submitted.

The dismissed management is the party with an interest in the decision of the meeting regarding the dismissal of the management, because as the party who feels aggrieved by the decision of the supervisory meeting. This can lead to a dispute in the general court with a lawsuit against the law on the decision of the board of directors meeting. Apart from disputes in general courts, the results of the decision of the supervisory meeting regarding the dismissal of the management must be notified to the Minister of Law and Human Rights (hereinafter referred to as Menkumham) and the valid notification must be proven by a

valid receipt. The legal receipt is a state administrative decision, so that there can also be disputes over state administrative decisions that occur in administrative courts.

Based on the description above, it is necessary to have a juridical review of dispute resolution in the general court and state administrative court between the foundation and the foundation's management who were dismissed based on the decision of the supervisory meeting. Based on the description above, the problems of the study is as follows:

- 1. How does the dispute between the foundation and the management of the foundation occur?
- 2. How is the disputes between the foundation and the management of the foundation through the judiciary settled?

### RESEARCH METHOD

Normative legal research is legal research that puts the law as a building system of norms. The norm system that is built is about principles, norms, rules from laws and regulations, court decisions and doctrines (Fajar & Achmad, 2017). The research approach is used to determine from which side an object of research will be studied (Suteki & Galang, 2018). This study uses several research approaches, namely: the statutory approach is used by looking at several regulations related to dispute resolution between the foundation and the foundation's management, and the case approach is used by conducting research that identifies court decisions who have qualified jurisprudence regarding disputes that occur in the foundation. The study is carried out on court decisions that use theoretical foundations, such as theories or teachings, legal principles, legal concepts, and legal adages (Diantha, 2016).

Sources of legal materials in normative research are primary, secondary and tertiary, thus this research uses the legal materials studied, including (Efendi & Ibrahim, 2018): primary legal materials, secondary legal materials and tertiary legal materials. The technique of collecting legal materials, namely all legal materials in this study, was carried out by literature study. The literature study, both primary and secondary legal materials, will be collected through recording in the form of documents using a file system (Suwitra, 2009). The technique of analyzing legal materials is descriptive analytical, where primary legal materials and secondary legal materials are analyzed which will later reveal the weaknesses, shortcomings and strengths of a law or regulation under study, and seek to find the relationship between the formulation of a legal concept or legal proposition between articles in the legislation same invitation (Ali, 2013).

### **RESULTS AND DISCUSSION**

The Dispute Between the Foundation and Its Management

The enactment of the Law on Foundations is intended to provide legal certainty for foundations, even the Law on Foundations can be used as a basis for taking action in case of irregularities. One of the obstacles to professionally managing the foundation is the existence of problems that must be addressed both internally and externally by the foundation. Running a foundation's activities is not as easy as one might think, because the non-profit character of the foundation requires a lot of support from various parties. A

good collaboration between external and internal parties brings tremendous impact both in terms of finance and in terms of realizing the vision and mission of the foundation itself as an organization.

Organizing is the basic activity of management, carried out to manage all the resources needed, including the human element. Humans are the most important elements in organizing; humans can carry out tasks that are interconnected. The main purpose of organizing is to guide people to work together effectively (Tery, 2984). The management of a good foundation, of course, cannot be separated from a good managerial system, which is carried out by humans who run the managerial system. Humans who run the managerial system in the foundation are the organs of the foundation consisting of coaches, administrators and supervisors. This requires good cooperation between all the organs of the foundation in order to run the foundation as well as possible. The authorities, duties and functions of each organ of the foundation are regulated in the provisions of the legislation governing the foundation and in the articles of association and by-laws of the foundation itself.

Based on the authority possessed by each of these organs, it is related to the theory of authority. Indroharto, stated that there are three kinds of authority that come from the laws and regulations. The authority includes attribution, delegation and mandate (Ridwan, 2008). Within the Foundation, supervisors, administrators and supervisors are prohibited from holding concurrent positions in order to avoid the possibility of overlapping authorities, duties, and responsibilities between the organs of the foundation. At the same time, this regulation is aimed to prevent harm to the interests of the foundation or other parties because the authorities of the foundation organs are interrelated and the positions cannot be held concurrently. The authority is the ability to carry out certain legal actions.

Authority is also defined as the right possessed to make decisions, attitudes or actions based on the responsibilities given. Elements of authority or authority, as stated by Philipus M. Hadjon (2005), include:

According to the Law on Foundations, a builder is an organ of a foundation that has authority that is not delegated to the management or supervisor by law or by the articles of association. Those who can be appointed as supervisors are the founders of the foundation or who based on the decision of the members' meeting are considered to have high dedication to achieve the aims and objectives of the foundation. Trustees may not hold concurrent positions as administrators or supervisors, whose authorities include: decisions regarding amendments to the articles of association, appointment and dismissal of members of the management and supervisory members, determination of general policies of the foundation based on the articles of association of the foundation, ratification of work programs and the draft annual budget of the foundation as well as making decisions regarding the merger or dissolution of the foundation.

According to the law on foundations, the management is the organ of the foundation that carries out the management of the foundation. A person can be appointed as an administrator who can carry out legal actions and may not concurrently serve as a supervisor or supervisor. The management of the foundation is appointed by the supervisor based on the decision of the supervisor's meeting for a period of 5 years, and can be reappointed for 1 term of office,

meaning 5 years later. The management consists of the chairman, secretary and treasurer who during carrying out their duties must be in accordance with the aims and objectives of the foundation. If a board member is found to have acted detrimental to the foundation, then based on the decision of the board of directors meeting, the board can be dismissed. In principle, the management is responsible for the management of the foundation or for the interests and objectives of the foundation, and has the right to represent the foundation both inside and outside the court.

However, the management is not authorized to represent the foundation if there is a case before the court between the foundation and the member of the management concerned or members of the management have interests that conflict with the interests of the foundation. In addition, the management is prohibited from binding the foundation as a guarantor of debt, transferring the assets of the foundation except with the approval of the builder and burdening the assets of the foundation for the benefit of other parties. The articles of association can also limit the authority of the management in carrying out legal actions for and on behalf of the foundation. And if there is bankruptcy due to the fault or negligence of the management, and the assets of the foundation are not sufficient to cover the losses, then the management must be jointly responsible for the loss.

The supervisor is the organ of the foundation in charge of supervising and providing advice to the management in carrying out the activities of the foundation. Supervisors may not double as coaches or administrators, and can be dismissed at any time based on the decision of the supervisory meeting. The term of office of the supervisory organ is 5 (five) years which is the same as the term of office of the management organ and can be reappointed according to the provisions stipulated in the articles of association. This is intended so that there is no time gap in carrying out duties between supervisors and management, simultaneously being appointed and dismissed so that the time gap is not too long unless there are other things outside the provisions, the organ of the foundation resigns or dies (Panggabean, 2007).

The supervisor has the authority to dismiss members of the management with the status of temporary dismissal, then the supervisor is obliged to summon members of the management to defend themselves. The coach can then revoke or approve the dismissal. Just like members of the board of directors, if in the foundation there is a bankruptcy due to the fault or negligence of the supervisor, and the assets of the foundation are not sufficient to cover the losses due to bankruptcy, then each member of the supervisory board must be jointly responsible for the loss, unless they can prove that the bankruptcy was not due to negligence or supervisor error.

The provisions of Article 31 paragraph (2) and Article 40 paragraph (3) require that the appointment of members of the management and supervisors, the condition is that they are individuals who are capable of carrying out legal actions. This means that everyone can be appointed, but by considering various aspects, such as aspects of education and experience, aspects of ability and responsibility, managerial and professional aspects (Margono, 2015).

The development of several foundations in Indonesia seems to have tended to deviate from the philosophical goals of establishing the foundation. This can happen because it is difficult to define what is meant by social activities. For example, foundations can be engaged in education and hospitals. However, in reality many educational and health institutions are

pursuing profit. Therefore, it is often said that to get a good education and health care one has to pay a lot of money.

In addition, the foundation is used as PT. Such a foundation was established with the real intention of seeking profit, either directly or indirectly. Foundations with this category are like companies that aim to get tax breaks. This is not only an abuse in the pursuit of profit, but a more fundamental one is the misuse of the foundation. This is what often happens to foundations that do not reflect an open and accountable foundation's activities. Various individual and/or group interests arise above the interests of the foundation's aims and objectives.

The authorities, duties and obligations of each organ of the foundation, which have been described previously, are one of the triggers for disputes that occur in the internal body of the foundation. When the supervisor has appointed the board, the board must have full responsibility for the management of the foundation and this must be carried out in good faith and full of responsibility for the interests and objectives of the foundation. Moreover, the management is fully responsible personally if the person concerned carries out his duties not in accordance with the provisions of the articles of association. Various factors can cause this board to be dismissed before its term of office. The dismissal is carried out based on the decision of the board of directors meeting, where the board of directors during the course of carrying out their duties is deemed to be detrimental to the foundation.

The supervisor as an organ that has the task of supervising and providing advice to the management in carrying out their duties, apparently also has the authority to temporarily dismiss the management. This temporary dismissal must state the reasons and must be reported in writing to the supervisor. After the report is received, the supervisor is obliged to summon the member of the management concerned to be given the opportunity to defend himself, so that the coach is obliged to revoke the decision to temporarily dismiss or dismiss the member of the management concerned. If the supervisor does not implement the mechanism, the temporary suspension is null and void by law.

The supervisor who in this case has dismissed the management based on the temporary dismissal decision issued by the supervisor and/or the supervisor who immediately dismisses the management must be based on the decision of the supervisor's meeting. In the case of the appointment, dismissal, and replacement of the management, the decision of the supervisor regarding the dismissal of the management, is carried out not in accordance with the provisions of the articles of association. Then, at the request of the interested party or the prosecutor's office, the court may cancel the appointment, dismissal, or replacement in not later than 30 (thirty) days from the date the cancellation request is submitted.

The management who is dismissed as an interested party has the authority to apply for cancellation and replacement for himself and this must be done through a court decision. The management who has been dismissed by the supervisory meeting is not authorized to represent the foundation because there is a risk of the conflict of interests between the foundation and the member of the management.

This condition is one of the internal disputes that occur at the foundation and the settlement is carried out through litigation or courts. Disputes regarding the dismissal of the foundation's management are sensitive matters so that the settlement carried out by a

court process aims to obtain certainty, justice and benefit for all conflicting parties.

Dispute Resolution of the Foundation and the Management of the Foundation by the Court.

Dispute is something that causes differences of opinion, quarrels, disputes, disputes, disputes and cases. Disputes or conflicts are a form of actualization of differences in interests between two or more parties (Sutiyoso, 2006). A situation where two or more parties are faced with different interests, will not develop into a dispute if the party who feels aggrieved only harbors feelings of dissatisfaction or concern. A situation changes or develops into a dispute if the party who feels aggrieved expresses his dissatisfaction or concern directly or indirectly to the party causing the loss or another party (Usman, 2002).

Dispute resolution according to the theory of Dean G Pruitt and Jeffrey Z Rubin (2004) there are 5 (ie):

Contending (competing), which is trying to implement a solution that is preferred by one of the parties.

Yielding, which is lowering aspirations and being willing to accept the shortcomings of what is actually desired.

Problem solving (problem solving), which is a satisfactory alternative from both parties.

With drawing (withdrawing), which is choosing to leave the dispute situation, both physically and psychologically.

In action (silent) i.e. not doing anything.

In the literature, Dispute Resolution Theory is also called Conflict Theory. The definition of conflict itself was formulated by Dean G Pruitt and Jeffrey Z Rubin (2004) that conflict is a perception of perceived divergence of interest or a belief that the aspirations of the conflicting parties cannot be achieved simultaneously (Talib, 2013).

The settlement of disputes between the foundation and the dismissed management is a dispute that can actually be resolved through non-litigation. However, the parties tend to take the litigation route, the differences in the interests of the parties cannot be resolved amicably. The dismissed management took the litigation settlement route also because the decision to dismiss and replace the management had taken place, so that a peaceful settlement would certainly lead to his absolute dismissal.

According to Schut (1988), liability can arise from agreements (more precisely default) and from unlawful acts. In the first case, the damages must be paid because the main or secondary obligations under the agreement are not fulfilled (performance obligations or guarantee obligations). While the second, the loss must be replaced due to a violation of a legal norm (orders and prohibitions).

The Decision Letter for Dismissal and Substitution of Foundation Management is an object of dispute that can be sued in court. This type of lawsuit is a lawsuit against the law. A lawsuit against the law is submitted to the general court that handles criminal and civil cases. The governing body consists of the District Court as the court of first instance and the High Court as the court of appeal. The District Court is domiciled in the Capital of the Regency/City which is its jurisdiction. While the High Court is domiciled in the Capital of the Province with the authority to cover the territory of the Province. This trial is regulated by Law No. 2 of 1986 concerning General Courts jo. Law No. 8 of 2004 jo. Law No. 49 of 2009 jo. Constitutional Court Decision Number 37/PUU-X/2012.

The dismissed management file a lawsuit against the law against the foundation due to the Letter of Dismissal and Change of Management based on the supervisor's meeting in accordance with Article 1365 of the Criminal Code. In this case, an unlawful act must contain the following elements:

- 1. There is an action
- 2. The act violates the law
- 3. There is an error on the part of the perpetrator
- 4. There is a damage for the victim
- 5. There is a causal relationship between actions and losses.

Munir Fuady (2005) also argues that the unlawful act can be in the form of doing or not doing something, where the act must be against the law which includes the act of violating the applicable law and the rights of others guaranteed by law, the acts that are contrary to the legal obligations of the perpetrator, actions that are contrary to decency, and actions that are contrary to the interests of others. In terms of proving that the decision of the supervisory meeting is an act against the law, of course, it requires clear evidence.

The dismissed management no longer has the authority to represent the foundation inside and outside the court. Thus it can be said that the dismissed management will represent himself as the plaintiff in the dispute. The Law on Foundations explains that the supervisor has the authority to dismiss the management, so that since the issuance of the decision to dismiss and change the management, the dismissed management has ceased to be an administrator at the foundation. Managerial accountability is the most important part of the credibility of management in the foundation. Failure to comply with the principle of accountability can have serious implications.

The substitute manager who has been appointed by the supervisor is obliged to report the dismissal, replacement and appointment of a new management to the Menkumham. The substitute manager who has been elected and appointed based on the supervisory meeting has the authority to act outside and inside the court. Thus, all the authorities, duties and obligations of the dismissed management have been transferred to the new management. Thus, the new management has the authority to represent the foundation in court on the dispute. This is because the supervisors do not have the authority to represent the foundation in court.

Notification of dismissal, replacement and appointment of new management based on the supervisor's meeting submitted to the Menkumham then receiving a notification receipt from the Menkumham for the change of foundation data. This receipt of notification of changes to foundation data is a written determination issued by the Menkumham as State Administration Officer. The definition of written determination must be considered carefully. Because a written stipulation does not mean that it must be stated or made formally like a decision letter or a building permit. However, a written determination is enough just to be written on paper. This is because the written determination is only intended for later proof (Riza, 2019).

The dismissed management if he/she considers that his/her dismissal is not in accordance with the provisions of the applicable laws and according to the articles of association, shall file a lawsuit against the law to the Menkumham. With the issuance of the PTUN decision,

the dismissed management filed a lawsuit with the State Administrative Court. The state administrative court only handles cases of lawsuits against state administration officials due to written decisions that they make detrimental to a person or civil legal entity. This trial is regulated by Law No. 5 of 1986 concerning State Administrative Court jo. Law No. 9 of 2004 jo. Law No. 51 of 2009 jo. Constitutional Court Decision Number 37/PUU-X/2012.

Thus, the settlement of disputes in the Courts, especially regarding the dismissal, replacement and appointment of the foundation's management can be done in 2 (two) ways, namely filing a lawsuit in the general court with the object of dispute over the decision of the supervisor's meeting and filing a lawsuit to the state administrative court for the issuance of a receipt for changes to the foundation data. The results of the decisions that have permanent legal force from the two courts will determine whether the decision letter of the supervisory meeting in question and the decision of the Menkumham is in accordance with a fixed mechanism, so it can be used as a way to resolve disputes within the internal foundation between the dismissed management and the foundation. Thus, the parties involved in the case must each be able to prove the truth of their respective opinions and then the court will decide on this matter.

### **CONCLUSION AND SUGGESTION**

Disputes between the foundation and the management of the foundation are caused in the implementation of the activities of the foundation that are not in accordance with the applicable laws and regulations and the implementation of the articles of association and the household of the foundation itself is a violation. If there is a dispute within the foundation, then what can happen is to hinder the implementation of the foundation's activities, moreover the activities carried out by the foundation are for social, religious and humanitarian purposes for the benefit of the community.

Settlement of disputes between foundations and foundation administrators through the judiciary is one alternative dispute resolution that can be used and is stated in the provisions concerning foundations. Settlement of disputes through general courts or state administrative courts depends on the type of dispute, what is the object of the dispute and the circumstances in which a person or a party is determined to meet the requirements and therefore has the right to apply for a dispute or dispute resolution or case before the Court.

Disputes between the foundation and the management of the foundation must be resolved. It can be avoided by means of each organ of the foundation carrying out its authority, duties and obligations which have been regulated in the provisions of the legislation and the articles of association of the foundation. The foundation is an organization that is engaged in social, religious and humanitarian fields, so it needs equipment that is able to carry out the duties of managing the foundation properly.

The settlement of disputes between the foundation and the management of the foundation should be resolved peacefully. Litigation settlement requires a lot of time, money and effort, until finally the management of the foundation becomes focused on resolving cases in court. The parties to the litigation need to be aware of whether their obligations have been carried out properly. In addition, awareness is needed since litigating in court will have a significant impact on the survival of the foundation itself.

### REFFERENCE

Ali, H. Z. (2013). Metode Penelitian Hukum. Jakarta, Sinar Grafika.

Chatamarrasjid. (2000). Tujuan Sosial Yayasan dan Kegiatan Usaha Bertujuan Laba. Bandung, Citra Aditya Bhakti.

Diantha, I M.P. (2016). Metodologi Penelitian Hukum Normatif Dalam Justifikasi Teori Hukum, Jakarta, Prenada Media Group.

Dunne, J.M.V. & Burght, G.V.D. (1988). Perbuatan Melawan Hukum (Pasal 1365 KUH Perdata. Transleted by KPH. Hapsoro Jayaningprang, Ujung Pandang: Kursus Hukum Perikatan, Dewan Kerja sama Ilmu Hukum Belanda dengan Indonesia Proyek Hukum Perdata.

Efendi, J. & Ibrahim, J. (2018). Metode Penelitian Hukum Normatif dan Empiris, Depok, Pranamedia Group. Fajar, M, & Achmad Y. (2017). Dualisme Penelitian Hukum Normatif dan Empiris, Cetakan IV, Yogyakarta, Pustaka Pelajar.

Fuady, M. (2002). Perbuatan Melawan Hukum; Pendekatan Kontemporer. Ibandung, Citra Aditya Bakti.

Hadjon, P. M. (2005). Pengantar Hukum Administrasi Indonesia. Yogyakarta, Gadjah Mada University Press.

Margono, S. (2015). Badan Hukum Yayasan, Dinamika Praktek, Efektivitas dan Regulasi di Indonesia. Bandung, Pustaka Reka Cipta.

Murjiyanto, R. (2011). Badan Hukum Yayasan (Aspek Pendirian dan Tanggung Jawab). Yogyakarta, Liberty. Panggabean, H. P. (2007). Praktek Peradilan Menangani Kasus Aset Yayasan. Jakarta, Jala Permata.

Pruitt, D. G, et al. (2004). Konflik Sosial, Yogyakarta, Pustaka Pelajar.

Ridwan, H.R. (2008). Hukum Administrasi Negara. Jakarta, Raja Grafindo Persada.

Riza, D. (2019). Hakikat KTUN Menurut Undang-Undang Peradilan Tata Usaha Negara Vs Undang-Undang Admnistrasi Pemerintahan, Jurnal Soumatera Law Review, 2(2), 207-220. Retrieved from: http://doi.org/10.22216/soumlaw.v2i2.3566

Suteki & Galang, (2018). Metodologi Penelitian Hukum (Filsafat, Teori dan Praktik. Depok, ), Raja Grafindo Persada.

Sutiyoso B, (2006). Penyelesaian Sengketa Bisnis, Yogyakarta, Citra Media.

Suwitra, I M, (2009). Eksistensi Hak Penguasaan Dan Pemilikan Atas Tanah Adat Di Bali Dalam Perspektif Hukum Agraria Nasional. Malang, Universitas Brawijaya.

Talib, I. (2013). Bentuk Putusan Penyelesaian Sengketa Berdasarkan Mediasi, Jurnal Lex et Societas, 1(1), 19-30. Retrieved from: https://doi.org/10.35796/les.v1i1.1295

Terry, G.R. (1984). Prinsip-Prinsip Manajemen (Guide To Manajemen). Jakarta, Bumi Aksara.

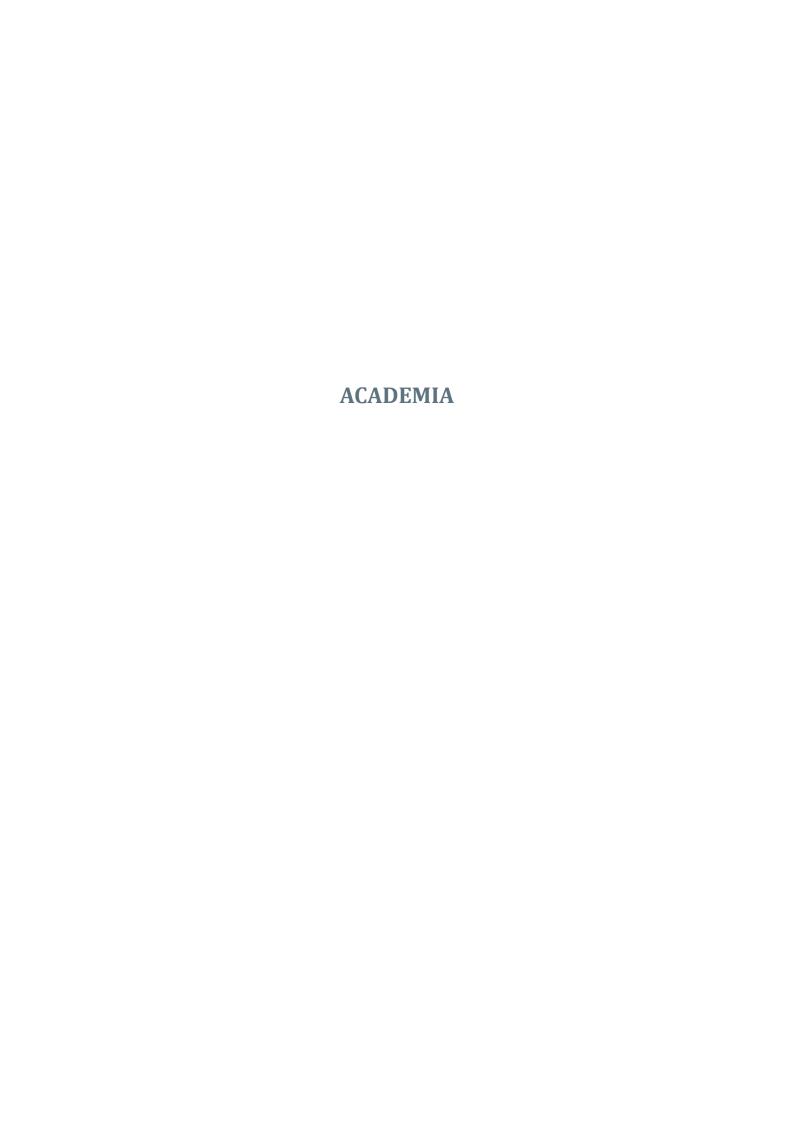
Usman. (2002). Pilihan Penyelesaian Sengketa di Luar Pengadilan, Bandung, Citra Aditya Bakti.

### **Law and Regulations**

Indonesian civil code.

Law of the Republic of Indonesia Number 28 year 2004 concerning the Amendments to Law Number 16 year 2001 concerning Foundations (State's Decree of the Republic of Indonesia year 2004 Number 115) and Addendum to the State Decree of the Republic of Indonesia Number 4430

The verdict of the court for the civil case No.451/Pdt.G/2008/PN.JKT.BAR



## INTERNATIONAL LEGAL COMMUNICATION: A NEW MASTER PROGRAMME AT THE UNIVERSITY OF WASAW

Joanna Osiejewicz

Do you want to learn how to create, interpret and explain the law in understandable language? The University of Warsaw invites you to interdisciplinary MA studies in English "International Legal Communication".

The goals and concept of education in the 2nd degree course of studies "International Legal Communication" meet the requirements of the modern world, in particular the requirements accompanying the development of legal sciences and linguistics. One of the extremely current, global challenges is the need to provide recipients of the law with adequate legal information. International legal communication deals with these issues.

International Legal Communication focuses on international, supranational and transnational legal regimes in conjunction with linguistic elements of objective legal and legal reality, such as facts, events, phenomena, processes etc.; physical, mental or emotional actions and behavior; human creations, both physical and spiritual; human states, thoughts and feelings, images, mental constructs, etc., and linguistic statements expressing those thoughts, images, or mental constructs that relate to the formulation, expression and reconstruction of legal information carried by and communicated by legal regimes.

International legal communication takes place on three levels:

creation and shaping of law and related communication between entities that create and shape this law;

making the law public, i.e. informing recipients of the law about the content of the law and the rights and obligations arising therefrom;

advocacy, to the extent that lawyers process legally relevant information and communicate it to their clients (laymen) and other lawyers, including judges, respectively.

Consequently, teaching and research on international legal communication will be conducted in three specialties, in the following system:

1st year students follow a joint program during the first two semesters of studies.

in the middle of the second semester, students submit a written declaration regarding the choice of specialty from the second year of studies:

"Design Thinking in Law" – research on the creation and shaping of law in the linguistic context, its conceptualization, terminology, textemics and logic;

"Transference of Legal Knowledge" – research on the social perception of legal information, in particular the simplification of this information and its anthropological and ethnographic aspects;

"Epistemology of Lawyering" – research on communication effectiveness in the field of advocacy.

An integral element of the studies are research workshops conducted with the participation of stakeholders and together with foreign research centers. Outstanding students will have the opportunity to study trips and participate in international scientific conferences.

Graduates of this field of study will have unique, interdisciplinary knowledge and practical skills predisposing them to continue their education at doctoral schools, and in the future—to research.







**International Legal Communication** *Master Studies* 



